

S  
MARINE CORPS

# Gazette

MAY, 1947

30c



## This Month's Cover

☛ "MARK FIFTEEN!" Judging from his elated expression, the boot in the prone position seems to have black disks before his eyes. Marines, from coast to coast and beyond, are wearing shooting jackets this spring; and the crack of small-arms fire becomes a familiar part of post routine. No live targets this year, but marines are bound to burn powder, whether or not the targets shoot back. Maj Houston Stiff drew the cover.

### THE MARINE CORPS GAZETTE

Professional Magazine for the United States Marines  
JOURNAL OF THE MARINE CORPS ASSOCIATION  
Offices: Marine Corps Schools, P. O. 106, Quantico, Va.  
Telephone: Extension 4780



BrigGen O. P. Smith . . . . . Editor-in-Chief  
Maj Houston Stiff . . . . . Editor and Publisher  
Capt Edwin Simmons . . . . . Managing Editor  
Lt Ray W. Arnold . . . . . Business Manager

#### EDITORIAL BOARD

Col A. H. Butler                      Col J. Wehle  
LtCol T. J. Colley                    LtCol F. P. Henderson

EDITORIAL STAFF: PFC David M. Moffit, PFC William A. McCluskey, Miss Marion Dickerson.

STAFF ARTIST: PFC John R. Beveridge.

BUSINESS STAFF: MSgt Horace L. Hinderliter, PFC Robert E. Levine, PFC Thurman Albertson, PFC William E. Larkin.

VOLUME 31, NUMBER 5. Published monthly by the Marine Corps Association, Marine Corps Schools, P. O. 106, Quantico, Va. Copyright, 1947. Entered as second-class matter at the post office at Quantico, Va., under the act of March 3, 1879. Additional second class entry at Baltimore, Md. Single copy, 30 cents; subscription rate, \$3.00 a year. Subscriptions of all armed forces personnel include membership in the Marine Corps Association. Articles, monographs, studies, and letters of professional interest are invited. Opinions expressed in the GAZETTE do not necessarily reflect the attitude of the Navy Department nor of Marine Corps Headquarters. GAZETTE material may not be reproduced without written permission.

**700,000  
STOCKHOLDERS**

**They are all a part of  
good telephone service**

The owners of the Bell System are everyday people like the rest of us, in all walks of life, in the cities, towns and rural areas of America.

More than half of the 700,000 owners of the American Telephone and Telegraph Company have been stockholders for ten years or more. More than half are women. One in every fourteen is a telephone employee.

About 210,000 stockholders own 5 shares or less. The average holding is 30 shares. No one person or institution owns as much as one-half of one per cent of the stock.

The savings of many people helped build the Bell System which serves so many people and gives employment to 625,000 men and women.



**BELL  
TELEPHONE  
SYSTEM**



## How Many People Read Your Gazette?

☛ NOT THAT WE MIND if you share your copy with friends, but it occurs to us that you may know someone who would like to have his *own* GAZETTE each month. If so, you can do him (and us) a favor by giving him the subscription form below. You can tell him also that if he's a member of the U. S. armed services—or an ex-member in good standing—he can join the Marine Corps Association and thereby get not only a subscription to the GAZETTE but discount privileges at the GAZETTE Bookshop as well. Just clip on the dotted line.

### THE MARINE CORPS GAZETTE

547

Professional Magazine of the Marine Corps  
BOX 106, MARINE CORPS SCHOOLS  
QUANTICO, VA.

DEAR SIR: I enclose \$3.00, for which—

- ☐ Enter my name for a one year subscription to the GAZETTE.
- ☐ As I am qualified for membership, enroll me as a member of the Marine Corps Association.\*

NAME AND RANK \_\_\_\_\_

ADDRESS \_\_\_\_\_

Signed \_\_\_\_\_

\*Membership in the *Marine Corps Association* includes a one year subscription to the GAZETTE and a 10% discount on all purchases from the GAZETTE Bookshop.





### The high resolution Sperry RADAR

Radar by Sperry reflects in design and construction the precision and dependability long associated with Sperry-built products in the marine field.

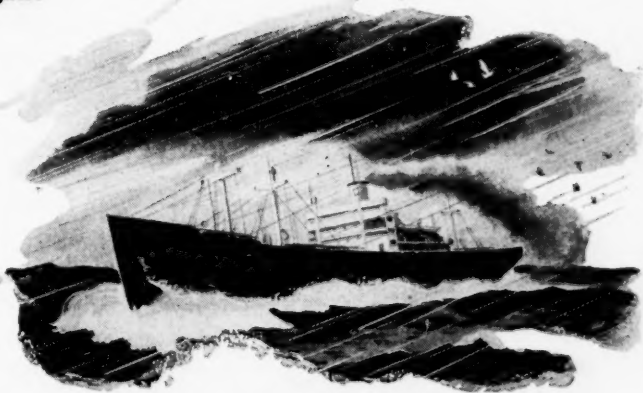
### ... through its sharper, clearer indications

Clear images on the Sperry Radar scope spotlight ships, land contours, buoys, and other above-water hazards through fog, mist, rain, smoke and total darkness.



### ... simplifies ship-operation for Navigator

The many outstanding features in Sperry Radar designed in its entirety to meet merchant ship operating requirements... 12-inch scope, variable range marker, true or relative bearing, high resolution, unexcelled minimum range... make this equipment the choice of all discerning ship operators.



AND IN THE AVIATION FIELD, Sperry Flight Instruments, Gyropilot and Automatic Approach Control help make flying safer and easier for pilot and passenger alike.



**Sperry Gyroscope Company, Inc.**

EXECUTIVE OFFICES: GREAT NECK, NEW YORK • DIVISION OF THE SPERRY CORPORATION  
LOS ANGELES • SAN FRANCISCO • SEATTLE • NEW ORLEANS • CLEVELAND • HONOLULU

# THE GREATEST FIGHTING TEAM IN HISTORY

—THE UNITED STATES MARINE CORPS AND THE UNITED STATES NAVY

Fellow members of the same great Service, the Marines and the Navy have proved the value of teamwork in the greatest war in history. Knowledge of the other man's job and problems, the first requisite of teamwork, will be even more vital in coming years. The best way for the Marine to keep advised of what the Navy is doing and thinking and planning is to join the U. S. Naval Institute and read the Naval Institute PROCEEDINGS regularly.

The U. S. Naval Institute is proud of the fact that many of the outstanding officers of the Marine Corps have long been members of the Naval Institute. It would like to have *all* personnel of the Marine Corps as members.

Therefore, the Naval Institute extends to the Marine Corps the same cordial invitation to membership that it extends to all the rest of the Navy. Regular Marine Corps officers can become regular members of the U. S. Naval Institute, and Marine Corps Reserve officers and all other Marine Corps personnel can become associate members. The membership dues in both cases are the same—\$2.00 per year, which includes the U. S. Naval Institute PROCEEDINGS without additional cost except in case of residence outside the United States and its possessions, where an additional charge of \$1.00 per year is made to cover extra cost of foreign postage.

The cost of printing the PROCEEDINGS alone far exceeds the membership dues; but due to its reserve funds and its other publishing activities, the Naval Institute never makes additional assessments on its members.

Organized in 1873, the U. S. Naval Institute is one of the world's oldest organizations for disseminating professional military information.

Any U. S. Marine—Regular, Reserve, or Retired—can become a member of the U. S. Naval Institute by simply filling out the membership application blank printed below, and mailing it in with his check.

## APPLICATION FOR MEMBERSHIP

U. S. NAVAL INSTITUTE  
ANNAPOLIS, MARYLAND

Date.....

I hereby apply for membership in the U. S. Naval Institute and enclose \$2.00 in payment of dues for the first year, PROCEEDINGS to begin with the.....issue. I am interested in the objects and purposes of the Institute, namely, the advancement of professional, literary, and scientific knowledge in the Navy. I am a citizen of the United States and understand that members are liable for dues until the date of receipt of their written resignations.

NAME.....

PROFESSION.....

ADDRESS.....

# PASSING IN REVIEW

## BOOKS OF INTEREST TO MARINE READERS

### Marine history . . .

THE ISLAND WAR—Major Frank O. Hough, USMCR. 413 pages, illustrated. Philadelphia and New York: J. B. Lippincott Company.

\$5.00

*The Island War* is a narrative account of operations of Marine Corps units in the Pacific during World War II. As the author points out, "it is out of the question for genuine *history* to be written within such a short time of the events described, and this book makes no pretensions on that score." What Maj Hough has done is to produce a well-written and very readable book, fully understandable to civilians and yet retaining the professional touch. His narrative is remarkably accurate and has the feel of authenticity. It is accurate because Maj Hough had access to all pertinent records, and it is authentic because his own experience was authentic. He was no stranger to the Marine Corps at the outbreak of World War II. He had finished up World War I as a sergeant in a rifle unit of the Marine Corps. Then he completed his education and engaged in journalistic activity until the outbreak of World War II. During World War II he served as a major in the Marine Corps and observed at first hand much of what he describes. Marines reading this book will recognize that it is written by one who had more than a passing acquaintance with jungles, with coral reefs, and with the bitter war of extermination conducted in the Pacific.

In his opening chapter entitled "The Marine Corps and Its Mission," Maj Hough has done a particularly fine job in presenting the case of the Marine Corps in an accurate and authoritative manner "to indicate the several physical and psychological features which combined to make it a weapon readiest to hand when the events of history finally caught up with a nation sadly unprepared in nearly every other respect."

*The Island War* is a book we have needed for some time.

FDK

### Navy history . . .

AMERICAN SEAPOWER SINCE 1775—Edited by Allan Westcott. 609 pages, illustrated. Chicago: J. B. Lippincott Co.

\$5.00

The authors of *American Seapower* sharply defined the task they set themselves, and within these self-imposed limits they have written an admirable history, clear, readable, and comprehensive. This is an operational history which stresses what was done rather than the how and why of what was done. At one stroke of definition great areas of controversial material were swept aside and the way cleared for a succinct account. The discerning reader will draw the basis for philosophical thought from the pages; the facts are there but not their implications.

Of 580 pages of text, 352 are devoted to the period before Pearl Harbor. World War II is treated in 228 pages. The only break in the narrative treatment occurs after the Spanish War when 55 pages are given to an explanation of the role of a modern navy: a discussion of Mahan's theory of seapower, the influence of geography, bases, lifelines, and geo-politics. Some indication of the compression necessary in a work of this scope is indicated by the treatment of the attack on Pearl Harbor in eight pages and the conquest of Tarawa in three. The authors could work only by an almost Spartan exclusion of material not relevant to their basic definition.

It is amazing just how much the authors have included. Every sea battle of any significance is described and illustrated with a sketch; developments such as the Dahlgren gun, smokeless powder, new types of ships are treated adequately; each land operation in the Pacific seems to be accurately summarized. In a smooth-running prose the authors move through the years, checking off items with a military precision.

There is one strange lack. The authors think in terms of ships and not of men; they have accomplished the not unprecedented task of writing the history of the Navy with only the briefest mention of the Marine Corps. Two pages

## AMERICAN SEAPOWER SINCE 1775

*edited by Allen Westcott*

From the first days of the American Navy until our mighty fleet pounded on the front door of Japan, the U. S. has grown in size and reputation to become the greatest seapower in the world. Here is the story of our Navy's rise; every sea battle of any significance is described and illustrated. New ships and new weapons of the Navy are also discussed.

*illustrated*

\$5.00

## REMINGTON HANDGUNS

*by Lt Comdr Charles L. Karr  
and Carroll Robbins Karr*

Another in the new series of authoritative books on small arms, *Remington Handguns* is one of the most specialized of the set. Here are compiled the background and general history of Remington small arms. A pictorial catalogue of all Remington percussion, breech loading, and converted pistols, as well as notes on collecting and shooting old handguns, is included.

*illustrated*

\$5.00

**GAZETTE BOOKSHOP**

USE ORDER BLANK ON PAGE 62

account for the Marines up until World War I; a paragraph sums up their activities in that war. Somewhat over 20 pages cover the Marine Corps' actions for World War II. I find that the word "amphibious" is not listed in the index; the six Marine divisions are mentioned, but neither the III nor the V Amphibious Corps. The Fleet Marine Force is not listed, but the subject of advanced bases is. In fact, the authors expressly assume in their preface a continuity of progress which is deceptive: "In our military history joint operations are no new development."

It is a marine's possibly somewhat prejudiced opinion that there is *not* an unbroken development in the history of joint operations. The strategy of the Pacific War can be studied adequately only by an understanding of amphibious operations. The Landing Force Manual of 1924 discloses a realization of the value of an advanced base but not the vaguest idea of how to seize it against a hostile force. The history of this war must begin with the Fleet Marine Force, the development of the theory of shore bombardment—which did not originate with the Navy—and FTP 167 and 211. The new landing craft, the amphibian tractor, and the island of Culebra have their place in this history as a matter of uncontrovertible fact.

With this exception—and it is an important one—this history becomes a reference work which can sweep a dozen others off the shelves.

PDC

### Shooting irons . . .

REMINGTON HANDGUNS—LtComdr Charles L. Karr and Carroll Robbins Karr. 127 pages, illustrated. Harrisburg, Pa.: The Military Service Publishing Company. \$5.00

In continuing the new series of authoritative books on small arms, the "N.R.A. Library" has this time produced a more specialized collector's reference work than in any previous case. The fact that Remington no longer produces pistols or revolvers, and has not been a major contender in the field for decades, confines the usefulness of this book primarily to collectors of antique firearms, a somewhat limited audience.

The book is well and completely done, including a brief history of the Remington Arms Company, a pictorial catalogue of all Remington percussion, breech loading, and converted pistols, and notes on collecting and shooting old handguns.



Its greatest weakness is a complete lack of information on the employment of these old guns. As their interest is entirely historic, the markets and demand which produced the evolutionary improvements of these weapons would provide a fascinating footnote to the history of the nineteenth century U. S.

The authors are husband and wife, an odd author combination in firearms literature. Comdr Karr has been collecting old guns for fourteen years and, with his wife, has put a great deal of research into this book. Its greatest value is the complete compilation into one volume of what was previously available only in fragments.

JDC

### Small unit actions . . .

**BATTLE STUDIES**--Col Ardant du Picq, trans. by Col John N. Greely and Maj Robert C. Cotton, USA. 273 pages. Harrisburg: The Military Service Publishing Co. \$1.00

Col Du Picq of the French Army was killed in battle in 1870. He left behind a small and incomplete body of writings that were published in France and widely admired. Translated by two officers of the U. S. Army in 1920, these writings have now become the latest issue in the *Military Classics Series* of the Military Service Publishing Company.

In the age of the great theorists, Clausewitz and Jomini, Col Du Picq was a realist, interested in small unit actions, in discovering the actual details of combat. He wanted to get information on how men actually behaved under fire. Discarding the theory that man fights because of a natural instinct of pugnacity, believing in the last analysis that man is dominated by fear, he explores the means by which man has been forced to face that fear and overcome it. The triple keys to success he found to be morale, discipline, and unity of organization, each adapted to the particular conditions of the society forming the armed force. He admires, for example, the phlegmatic and cool tactics of the English but admits that they are not suitable for the French; he discusses the difficulty that a democracy faces in confronting a nation like Prussia with a military aristocracy.

To prove and test his theory, he analyzes ancient battle and ancient battle techniques rather than modern battle "complicated and not easily grasped." Essentially, he sees two types of tactics developing through the centuries: the

An Insurance Policy with No War or Travel Restrictions

**DESIGNED for OFFICERS ONLY**



OFFICERS' FAMILIES receive the benefit of this insurance policy designed for officers.

THE UNITER is your assurance of complete satisfaction. There are no war or travel restrictions in this, the policy that offers you the best features of all known forms of permanent life insurance.

FOR FACTS concerning the UNITER LIFE INSURANCE POLICY send your name, rank, organization, date of birth and address to the Home Office.

**United Services Life Insurance Co.**

1600 20th Street, N. W., Washington 9, D. C.

## Battle Studies

*by Col Ardant du Picq*

Col Du Picq, French Army, was killed in battle in 1870. He left behind a small and incomplete group of writings that were later published in France and widely read. Translated into English by two U. S. Army officers in 1920, these writings have now become the latest issue of the *Military Classics Series*.

**\$1.00**

**GAZETTE BOOKSHOP**

USE ORDER BLANK ON PAGE 62



line against the mass. He believes the terrible effectiveness of the Roman legion was due to the line with supporting reserves well free of the actual fight and yet ready to move forward in relief. The mass, as adapted by the Greeks or the Gauls, for example, could not stand before the line; rear ranks were locked too close to the heat of battle and were eventually dominated by fear because they could see too much and yet not participate. In support of his theory he analyzes the two battles of Cannae and Pharsalus.

The Colonel takes these theories to a study of modern battle. He sends out questionnaires to officers of units that have been in combat. He tries to find out at what point the commander had to commit his troops, just when he lost control until the impact was over, just how the unit was reassembled after the attack. From these studies Col Du Picq hoped to be able to plot courses of training for future action. In an age of close ranks and volley fire he was already advocating open lines of skirmishers and aimed fire, preferably from the prone position. It is unfortunate that he apparently never had the opportunity to study the campaigns of our own Civil War.

Except when the Colonel discusses such matters as cavalry charges, the book is modern and forceful; certainly the war in the Pacific is an illustration of line against mass. The flaw in these writings is the failure of the author to analyze and break down the three abstractions

that he sets up: discipline, morale, and unity of organization; only indirectly does he approach a solution, perhaps too much of a philosopher to be able to lay down explicit directions that would hold for a dictatorship as well as a democracy. PDC

### The Roman Way . . .

CAESAR'S GALLIC CAMPAIGNS—By LtCol S. G. Brady. 230 pages, illustrated. Harrisburg: Military Service Publishing Company. \$2.50

To most of us *Caesar's Commentaries* are something dull we bored through in second year Latin. This is unfortunate because in a sensible translation, Caesar's reports on the Gallic campaigns are not only good but interesting reading.

Latest in the Military Service Publishing Company's Classic Series, *Caesar's Gallic Campaigns* is a loose and lively translation—really an interpretation—of Caesar's writings.

Perhaps the most interesting feature of the book is the 48 page appendix which gives the organization and equipment of Caesar's legions and auxiliaries, and his order and method of battle. The striking parallels between ancient and modern armies are immediately evident to the reader.

LtCol Sidney G. Brady is a retired officer of the Regular Army and a distinguished Latinist. EHS

## Rockets in the Civil War

✿ AT MALVERN HILL, 1862 . . . "Stuart shelled them a while with the horse artillery and opened on them with a Congrieve rocket battery, the first and last time the latter ever appeared in action with us. It had been gotten up by some foreign chap who managed it on this occasion. They were huge rockets, fired from a sort of gun carriage, with a shell at the end which exploded in due time, scattering "liquid damnation," as the men called it. Their course was erratic; they went straight enough in their first flight, but, after striking, the flight might be continued in any other course, even directly back toward where it came from. Great consternation was occasioned among the camps of the enemy [Federals] as these unearthly serpents went zigzagging about among them, and the demoralization among "Young Napoleon's" [Gen McClellan] mules was complete when the bursting of the rocket sprinkled the "liquid damnation" on their backs. A few tents were fired but the rockets proved to be of little practical value as an agent of destruction; shells were far better."—LT COL WILLIAM W. BLACKFORD, CSA, in *War Years with Jeb Stuart*, pages 84-85.

MAY 1947

## CONTENTS

|   |    |   |    |
|---|----|---|----|
| PASSING IN REVIEW .....   | 5  | THE MARINES IN THE PACIFIC WAR, PART IX,<br><i>Fletcher Pratt</i> .....             | 32 |
| THE NEW FMF .....   | 10 | REPORT ON FITNESS REPORTS, <i>LtCol Edward<br/>H. Drake</i> .....                   | 43 |
| IN BRIEF .....  | 15 | CASE FOR BETTER GEAR, <i>Maj Phillips D.<br/>Carleton</i> .....                     | 16 |
| CASE FOR BETTER GEAR, <i>Maj Phillips D.<br/>Carleton</i> ..... | 16 | THE VT FUZE VS. AMPHIBIOUS OPERATIONS,<br><i>LtCol Frederick P. Henderson</i> ..... | 50 |
| DEVIL BIRDS, PART IV, <i>Capt John DeChant</i> .....            | 20 | MESSAGE CENTER .....  | 61 |

Picture credits: All pictures official Army, Navy, or Marine Corps photos unless otherwise credited.

## This Month and Next

THE ABCs OF GUIDED MISSILES, prepared by LTCOL KEITH McCUTCHEON for the June and July issues, gives in understandable terms the facts that all military men should know concerning controlled projectiles. LTCOL McCUTCHEON not only discusses the technical considerations and limitations of the various types of guided missile but also fits them into the general pattern of offense and defense.

A little more light on the Marines' role in China is shed by LTCOL JAMES D. HITTLE in his article *Along the Peiping-Mukden Line* in next

month's magazine which gives one battalion's experiences in keeping a segment of the Peiping-Mukden line in operation.

Next month FLETCHER PRATT in his series, *The Marines in the Pacific War*, analyzes the Bougainville operation with his characteristic color and lucidity.

CAPT JOHN DECHANT in the next installment of *Devil Birds* takes the Marine air war to the Central Pacific, covering the Marshalls, Gilberts, Marianas, Palaus, and Iwo Jima.

# The New FME

✿ *To serve as the amphibiously trained, air-ground striking force required by the Navy for the seizure and defense of advanced Naval bases and for the conduct of such limited land operations as are essential to the prosecution of a Naval campaign . . . that is the defined mission of the Fleet Marine Force. How to prepare for this with a Marine Corps limited by law and budget to something under 100,000 men?—the planners at HQMC asked themselves. Certainly not by continuing with a skeletonized version of the wartime FME. So the Fleet Marine Force is in for an overhauling.*

Here is the aim: a flexible, mobile, essentially amphibious organization capable of easy regrouping for specific missions, ready to tackle various limited scale operations on short notice.

The two major steps in the reorganization have been; first, the elimination of the infantry regimental echelon within the brigade and division; second, a more economical use of service personnel by assigning Service Command a more direct role in future operations and by grouping remaining service personnel more logically.

Formerly a Marine division has consisted of a fixed number of infantry regiments each with a fixed number of infantry battalions; now a Marine division or brigade will have a variable number of reinforced infantry battalions, each capable of sustained independent action. This is partly an outgrowth of the highly developed battalion landing teams of the last operations of World War II; partly an anticipation of atomic warfare which will require greater dispersion and

decentralization of control. Also, most potential peacetime tasks require the use of smaller rather than large commands.

## The Infantry Problem

✿ THE NEW BATTALIONS will bear the former regimental title "Marines" and will be designated by traditional numbers. For example, the 4th Marines will continue to exist, although as a battalion rather than a regiment. Basically, the new battalion is the old infantry battalion rounded out sufficiently to include certain functions formerly performed at the regimental level. It consists of three rifle companies and a headquarters and service company. The latter includes five platoons: headquarters, service and supply, communication, antitank, and mortar.

The battalion assault platoon has been eliminated. It is felt that any well-trained infantry platoon with proper equipment can perform its function, and all marines will be trained in elementary demolitions.

The antitank platoon is the former 37mm platoon from the now-dissolved regimental weapons company with an added section of rocket launchers. The present 37mm gun is admittedly not completely satisfactory, but its retention in the organization at least accomplishes two purposes:

Battalions can perfect methods of employment of an antitank unit.

A pool of personnel is retained which can be used for manning new weapons when procured.

The remaining unit in the old weapons com-

Merely a shell of its former self, the Fleet Marine Force is in for a peacetime overhauling. The aim: a flexible, mobile, essentially amphibious organization, easily regrouped for specific missions, ready to tackle limited scale operations

pany, the 105mm howitzer platoon, will be eliminated. The 105mm howitzer motor carriage, M7, is obsolete and no suitable substitute weapon is in sight. Furthermore, the M7s are not entirely appropriate for a light, highly mobile force.

The service and supply platoon is a logical combination of personnel assigned service and supply tasks. One innovation in this platoon is a commissary section grouping all cooks and mess supervisory personnel allotted the battalion. As most messes are operated on a battalion basis this should result in greater efficiency. Also all barbers, carpenters, and small arms mechanics will be carried in this platoon. The other three platoons differ little from current tables of organization.

As yet the rifle companies remain unchanged with the exception of the deletion of their cooks, barbers, and small arms mechanics.

#### The Marine Division

✱ DIVISION HEADQUARTERS is being reorganized so that it can handle as many as nine infantry battalions although six will be the normal number assigned. This headquarters will be able to supply two command groups which can be detached for control of task units (which would roughly resemble the regimental combat teams of the past war) of two or three reinforced infantry battalions. If three task units are required, elements of division headquarters remaining after the detachment of the two command groups will control the third. (This principle of divisibility into halves or thirds has also been applied wherever possible to division special troops.)

In addition to the headquarters company, the division headquarters and service battalion includes four more companies: service, signal, military police, and reconnaissance.

The service company is a new organization designed to perform service, supply, and maintenance tasks for the H&S battalion. Combining all cooks, barbers, carpenters, and small arms mechanics allotted the H&S battalion, it partially replaces the eliminated service battalion and includes a motor transport platoon.

The division signal company will be sufficiently

large to install and maintain communications down to the battalion level as well as to establish and operate communications facilities for the command groups.

The military police and reconnaissance companies remain substantially the same although their strength has been somewhat reduced.

The assault signal company (ASCO) will be eliminated by including the naval gunfire liaison and air liaison teams on the special staff of division headquarters and by integrating the assault signal teams into the communications platoons of the infantry and shore party battalions.

The tank battalion will consist of a headquarters and service company and two tank companies. The H&S company includes a flame thrower tank platoon—two sections of three flame thrower tanks each. The tank companies have three platoons, five tanks to a platoon.

The service battalion is being dropped; most of its functions will be transferred to Service Command units. The motor transport battalion is also being eliminated. The functions of the former automotive repair company will be assigned to Service Command. Cargo trucks will be added directly to the H&S and infantry battalions. The amphibian truck company, formerly carried with the motor transport battalion, will be transferred to the amphibian tractor battalion. Primarily designed to supply beachhead artillery, the amphibian truck company consists of headquarters and two platoons of two sections, each of which can support one battery.

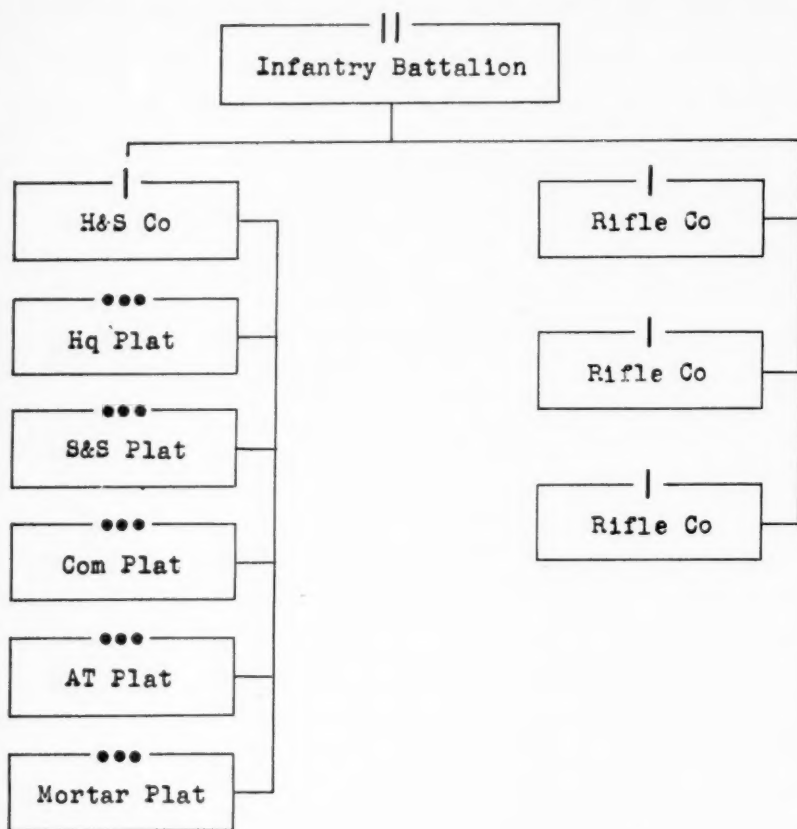
The amphibian tractor battalion will continue to have two amphtrac companies with four platoons each, but only one armored amphibian platoon will be retained.

The pioneer battalion is being redesignated the shore party battalion; its T/O will be based on average shore party requirements. The engineer battalion will include an H&S company and two engineer companies, each with three engineer platoons.

The medical battalion remains unchanged.

Consistent with the omission of the infantry





New battalions will bear former regimental title "Marines," and will be designated by traditional numbers.

regimental level within the division, the battalion echelon has been left out of the structure of the artillery regiment, which will now muster an H&S battery, a 4.5-inch rocket battery, and six 105mm howitzer batteries.

Each 105mm battery will have six howitzer sections and sufficient fire control facilities to operate independently. When batteries are combined in twos or threes for employment they will be controlled by a command group assigned from the H&S battery, which, like division headquarters, can supply two command groups for independent missions.

By this organization the number of artillery pieces is increased from 32 to 36. Approximately one-third of the batteries will be assigned 155mm howitzers for training and use as alternate weapons.

#### The Marine Brigade

AS THE CHART INDICATES, the reorganization of the Marine brigade parallels that of the

division. Normally the brigade will include three infantry battalions but this may be increased to four. The artillery battalion—which will be numbered after one of the war-famous artillery regiments—will consist of an H&S battery and three 105mm batteries with six howitzers each.

#### Service Command

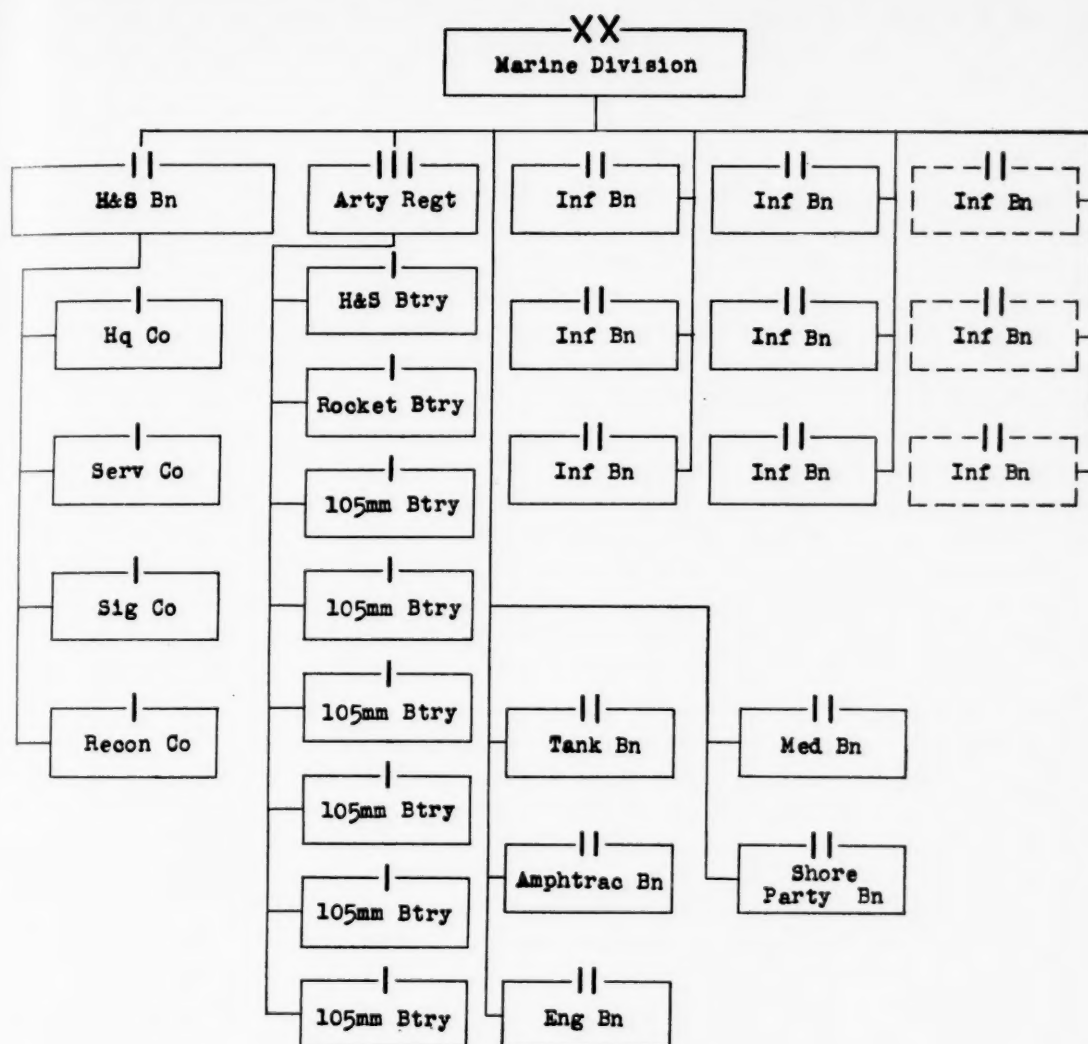
IN ORDER TO IMPROVE logistical support and at the same time eliminate uneconomical duplication of effort, many service, supply, and maintenance tasks formerly performed by tactical units are being reallocated to Service Command. The resulting saving in personnel has been demonstrated by the elimination of the service and motor transport battalions within the brigade and division structures.

Responsibility for maintenance beyond second echelon repairs will be transferred to Service Command. Also to be assumed is the responsibility for maintaining stockpiles of supplies not needed on an "everyday" basis. (With the exception of signal supplies—signal maintenance and supply has been excluded from the general plan because of the frequency and complexity of signal failures and the lack of necessity for elaborate facilities.) Now, how does Service Command propose to meet the increased logistical load?

The new Service Command will be kept very flexible with a minimum of administrative overhead. It will consist of a headquarters company and such service depots, combat service groups, and specialized service organizations as are needed.

The service depots correspond to the wartime base depots, are semi-permanent installations, and will be qualified to do third, fourth, and fifth echelon maintenance as well as able to handle large stockpiles of equipment and supplies.





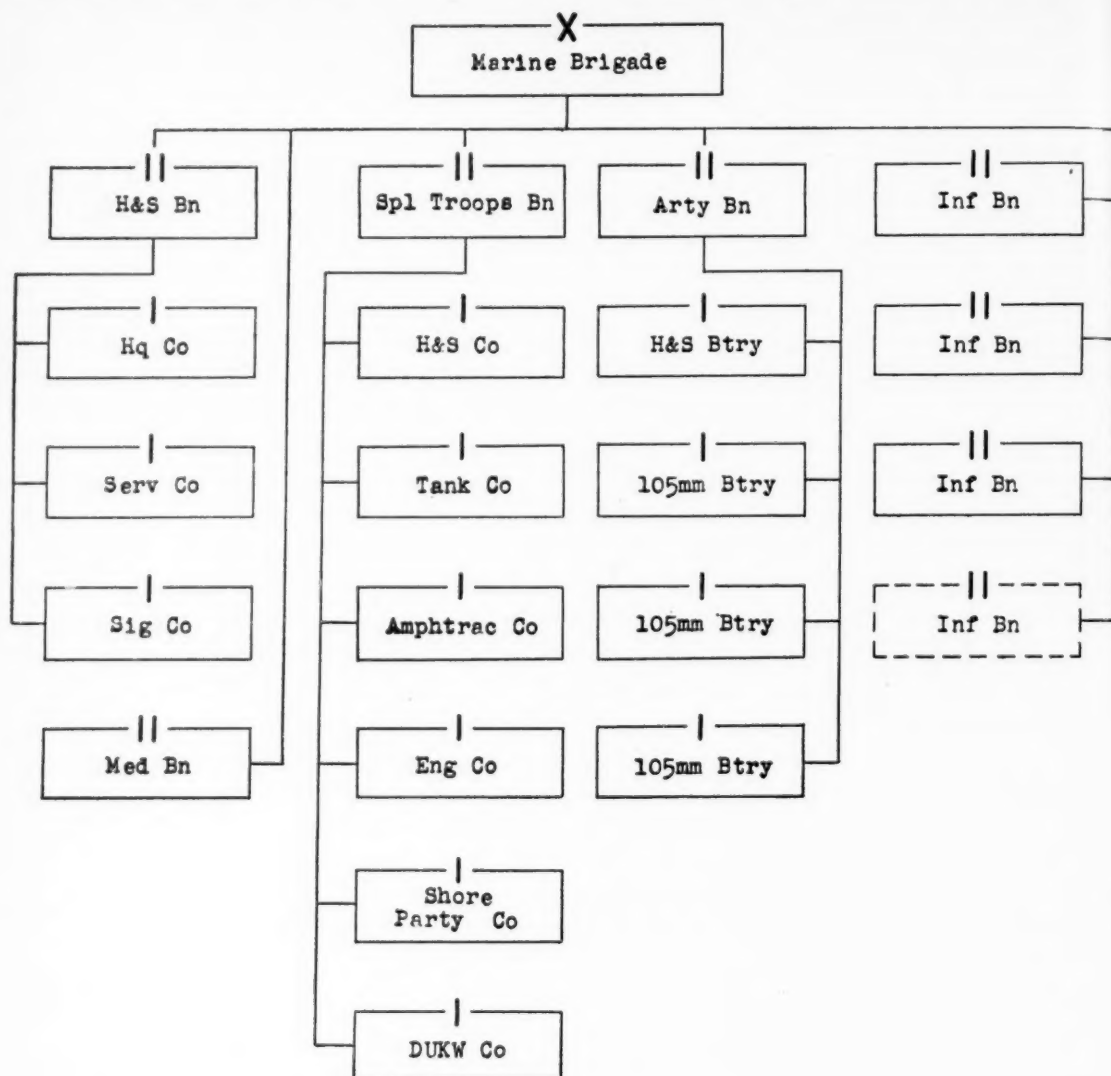
Formerly a Marine division has consisted of a fixed number of infantry regiments; now it has a variable number of highly-developed, reinforced infantry battalions.

The combat service groups are of two types: medium and light, and are designed for the close logistical support of Marine divisions and brigades respectively. Their composition is not fixed but will vary in accordance with the logistical support requirements for a particular operation. Resembling wartime field depots, they will be under the direct command of the commander of the tactical force employed.

When FMF units are garrisoned within continental United States, their attached Service Command units will reinforce quartermaster depots in a supporting role.

#### Other Force Changes

THE TOPOGRAPHIC COMPANIES formerly authorized the Force Headquarters are being dissolved and topographic platoons added to the divisions and brigades. Force Headquarters will retain its reproduction units. The motor transport companies in Force Headquarters and service battalions are being replaced by motor transport platoons attached to the service companies. This will make Force service units consistent with those authorized division, brigade, and infantry battalion headquarters.



Reorganization of Marine brigade parallels that of the division. Normally the brigade includes three infantry battalions but this may be increased to four.

### Conclusions

TABLES OF ORGANIZATION are being produced and distributed and the new organization will be effected shortly. It is hoped that in addition to providing a ready amphibious striking force, it will also provide a framework for balanced expansion in the event of a national emergency or mobilization. (At present the organization of the FMF on VJ day is the basis for mobilization planning.)

The new FMF must also serve as the proving ground for the development and evaluation of

new amphibious techniques. Special consideration must be given to new weapons, new geographical and climatic problems, new methods of transport—including air and submarine, and to increased mobility and shock effect. With it all must come further specialized training for personnel of all grades and ranks.

Later, after the remodeled FMF has been field-tested, there may be further revisions and modifications, but the goal has been set: maximum effectiveness as a fighting unit by keeping a maximum of personnel in "fighting units," a minimum in housekeeping.

US MC

# In Brief

Marines who served in China since the end of the war will soon be entitled to wear the ribbon of the *China Service Medal*, formerly a prewar China duty award. All men stationed there since 2 September 1945 may wear the ribbon. Men rating the ribbon for prior China duty who have also served during the new period will rate a star.

Army personnel may now wear the "*ruptured duck*" while in civilian clothing. Men still in the service, wearing civvies on liberty, may wear the emblem if they entered the Army prior to 31 December 1946. This is contrary to the original purpose of the emblem which was to signify that the wearer had been honorably discharged from the service.

More than a *quarter of the active strength* of the Marine Corps is on duty outside of the continental limits of the United States. Recently released figures indicate that in January there were 4,130 officers and men on sea duty and 28,811 officers and men at overseas shore stations out of a 107,398 personnel total.

*Tiny cameras*, small enough to be hidden in the palm of the hand, were used by intelligence units during the past war. The cameras snapped pictures about one-half inch square on a two-foot spool of film containing about 30 exposures in all. With the subject in focus from eight feet to infinity, it was possible to use the camera in a manner undetected except for a slight click.

A new method of *parachuting heavy, artillery and supplies* has been developed by the Army. Dropping a 75mm howitzer, weighing 2,240 pounds, from the rear door of a C-82 via means of a double parachute, the test proved successful as the weapon landed undamaged. The new system has a 14-foot chute start the drop and a 90-foot one to take over after being opened by the first.

There were *fewer airplanes built in 1946* than there were in 1939 according to figures recently released. Figures for 1939 set the production of planes at about 2,500 while in 1946 only 1,797 planes were built. Of these 1,330 were military planes while the other 467 were commercial types. Production of engines for heavy aircraft is down to 400 per month.

*Presidential Unit Citations* have been awarded to the 1st and 6th Marine Divisions (Reinforced) for service at Okinawa from 1 April 1945 to 21 June 1945. The new award cancels all unit citations previously approved by the Secretary of Navy for service on Okinawa for elements of both divisions. Participating members of the divisions cited may wear the PUC ribbon.

A *betatron*, 100 million-electric-volt atom smasher, first to be built on a commercial basis, is now being constructed for use at the atom testing laboratories in Oak Ridge, Tenn. Shipment of parts is expected to be finished by mid-summer. Weighing 160 tons, the betatron will be nine feet high, six feet wide, and 15 feet long.

*Tsingtao, China*, will be the operating headquarters for U. S. Marines in the Western Pacific according to latest releases. Marines from the 1st Marine Division at Tientsin and Peiping and the reinforced 3d Battalion, 4th Marines, along with other smaller units, will make up the garrison forces stationed there.

According to Almar 29, personnel who signed for two years of "*aviation duty only*" may apply for discharge or transfer to general duty. The Almar stated that 7,500 men in the "*aviation duty only*" group will have to be removed from the rolls of aviation units. If not enough men make application for one of the two moves then personnel will be assigned to major commands to meet reduction requirements.

# Case for Better Gear



✦ MARINES HAVE ALWAYS PRIDED THEMSELVES on being fast-moving, self-sufficient foot troops. During this last war, we suddenly lost that mobility. That we lost it was of little moment on the smaller islands, but in Okinawa, though we accomplished prodigies, we discovered that we were roadbound. In the final battle for Motobu, when the troops moved up into the mountains, we kept our lines advancing only by heartbreaking effort, with whole platoons carrying the clumsy cans of water and the square boxes of rations up into the hills. The one airdrop in this area—besides that to the reconnaissance company in a fixed plain location—was to the 1st Battalion, 29th Marines, and singularly unsuccessful. Perhaps the bitterest part about that drop was that a whole platoon had to be detailed to carry parachutes and containers to a road net far below.

We have to regain that mobility. But we cannot regain it by blindly accepting equipment from the Army which is designed for a purpose quite other than the mobility we need, nor can we regain it through the cogitations of an equipment board working from the top down.

Between wars, research on weapons goes on, spasmodically but endlessly; the *GAZETTE* is already bristling with blueprints and suggestions. Curiously, however, little is done for the marine who will carry the weapons or man them. All too frequently he enters upon a period of emergency with equipment that is outmoded or obviously unfit for the duty he has to perform. In this last war, for example, the marine had, shortly after the beginning of the conflict, new weapons; nobody had taken the trouble, however, to see that he came on the firing line rested, with a palatable ration on his back, and the necessary equipment to maintain himself. Twenty-five

years ago the thick rolled edge of the canteen cup burned the lips of thousands of men; until well toward the end of this war, it burned thousands more. The service uniform of winter greens prevented a man from raising a rifle to

his shoulder; the marine who went to Iceland turned out in them.

The cumbersome pack of

the last war had changed, but the new method of strapping on the blanket was new at the time of the French Revolution—when it was recognized as a rig fit only for marching on open roads, not through brush. Rations had improved, but they were still bulky, and D rations were a hangover from the last war that still frustrated any attempt by a water-rationed man to eat them. Throughout the war, troops were dependent upon daily supplies of rations, water, and ammunition rushed up to them on roads. That we were able to bring supplies up was largely a matter of good fortune. In the Central Pacific, we maintained an air superiority that preserved our supply dumps and protected our road-working machinery. We cannot expect that good fortune again.

✦ THE EFFECTS OF THE ATOM BOMB on infantry tactics are not yet sure, but two definite conclusions can be drawn: (1) The general tendency toward dispersion and more mobility than ever before; (2) huge supply dumps and large administrative units cannot be maintained in the field; frontline troops will have to be more or less independent of their bases for periods as long as two weeks. There is also a corollary to these main conclusions: There will be many undeclared wars fought around the globe by comparatively small bodies of troops, the "small wars" of the marines will be intensified and will bring with them the problem of equipping marines to fight in far-off and strange places

**By Maj Phillips D. Carleton**  
Illustrated by Maj James A. Donovan, Jr.



During the last war with its technical advances marines lost much of the mobility that formerly characterized crack light infantry. Individual equipment must be redesigned if each marine is to be a self-contained fighting unit

where roadnets do not exist and where it will be impossible to utilize modern automotive equipment. The general specifications of what equipment the marine will need can be laid down on the basis of these conclusions. He must have a palatable ration that can be eaten cold, if necessary. It is of prime importance that the rations be portable; i. e., the marine must be able to carry at least a week's supplies with him without making of himself a slow-moving packhorse. He must have a scientifically designed pack that will leave his shoulders free, one that at the same time will be easy to carry on narrow trails or through brush. He must have a light but effective tool, a knife of some kind, and light covering which will be at the same time waterproof and warm. Clothing must be of three different patterns—for the tropics, the temperate zone, and the arctic—each set scientifically designed.

More specific blueprints are a matter of prolonged study, but a backcast over this last war is clear indication of the things we did wrong and of the particular points of attack that we can make on the problem now.

Despite the rapid experimentation during the war, improvement in equipment hardly kept pace with improvement in weapons. The canteen, holding a fifth of a gallon, designed to provide the marine with drinking water only from breakfast till noon, was never superseded, although on the hot little islands of the Central Pacific another canteen was added. No effective provision was ever made for bulk containers that could be easily carried. The marine had a blanket unfit for tropical service; he threw it away and used a poncho because of its rain-shedding qualities, but the poncho was heavy, and an indifferently good covering in dry hot weather.

Nor were the new adaptations of equipment altogether fortunate. The drab-colored dungarees fitted well into the landscape; they were tough and long-wearing; but they were also unfit for tropical service since the cloth was tight-woven and choked free circulation of air. Moreover, it grew clammy when wet with sweat. Also, by almost diabolic contrivance, a cartridge belt around the hips bound all four pockets from any effective use. Steadily throughout the war ra-

tions grew more palatable, yet even the lightest of them, the K ration, could hardly be carried in any bulk. A day's ration filled the ordinary pack and left little over for even the barest necessities. Shoes proved effective, but for 25 years the Corps had been blandly issuing leggings that nearly reached the knee-cap. For 25 years marines had been cutting two inches off the top. It was not until preparations were made for Okinawa that Corps itself cut down the leggings before issuance. The eagerness with which marines sought to get hold of the cuffed boot of the Army proved that even the sawed-off leggings were not considered satisfactory. It is significant of the contrast between official and non-official standards that marines saw the Army mechanics cap, knew it was good, and began wearing it on Bougainville, two years before it became a standard article of issue.

The Marine Corps knife is an example of a tool or weapon soundly conceived and conscien-

*During some of the hottest fighting on Saipan, Tinian, and Okinawa, front-line marines were sometimes startled to find that their outfit had gained an extra officer—a calm, distinguished, be-moustached gentleman who seemed to like dangerous places and rough going. Turned out to be some kind of historian who had a mania for getting his facts first-hand. That was MAJ (then Capt) PHILLIPS D. CARLETON, who spent 56 consecutive days with the Okinawa assault troops.*

*MAJ CARLETON was a marine (enlisted) in World War I, but, to his sorrow, never got past Quantico. After his graduation from Brown University and various wanderings abroad, he settled down as a professor of English at the University of Vermont. Back in the Marine Corps in December 1942, he waged a relentless battle to get overseas, finally succeeding in time for the Saipan operation. Is now with the Civilian Production Administration.*



tiously manufactured. Stouter and less specialized than the Army knife, it yet had its flaws. Why was not the slight alteration made that would have allowed it to double for a short bayonet? The steel in it was splendid, but why were not provisions made for sharpening the blade in the field? Why, in other words, was the knife conceived and issued without any reference to a framework of the past? Machete bayonets were experimented with in the Philippines; the Germans had a hunting knife bayonet in the middle of the last century; our troops on the plains during the Indian wars had a seven-inch hunting knife, and Fremont had a special all-purpose knife forged for his expedition to California. One answer is, of course, that the urgent exigencies of war prevented any slow research, but that reason is no longer adequate.

✻ IT IS APPROPRIATE here to quote the dictum of a Marine Corps colonel: If you want to find the ideal tool, the ideal equipment for any set of circumstances, turn to the experts in that field, in other words to arctic explorers, to natives who have evolved special tools through the centuries. The first step in any such reference would be to discover the principles on which they had built their gear, then to embody those principles in the most modern of materials.



**Much can be learned from explorers and natives on the proper equipment to use.**

There are two important corollaries to the colonel's dictum: (1) Turn to the past and check what has gone before; i. e., set your new weapon or gear in a framework of reference; (2) turn to the men who have used the equipment and find out what they have done with it and how they have liked it—not necessarily by asking them, but by watching what they have kept and what they have discarded. This last point is perhaps the most important.

THROUGHOUT most of the war, orders prescribed just what the enlisted man would take ashore on a landing; lists were carefully made and packs as carefully inspected. Marines cheerfully took their loads ashore and as casually dumped what they didn't want into the nearest bush. Reports of operations complain of this practice, but not until late in the war was the common sense solution found: Let the men take ashore what they could and would use. The results were interesting. The average marine showed a reluctance to carry a pack if he could possibly avoid it. A pack constricted his shoulders if he was called upon to fire suddenly. He draped a poncho through his cartridge belt, stuck a spoon and a toothbrush in one pocket and a ration can in another—and was equipped. He showed a childlike faith in the Corps—which was seldom unjustified—to get up to him rations and water every night and a change of clothes before the operation was over. This is not to say that the marine had found the right solution; it meant only that he had done the best with what was provided for him. But his solution points to the line of experimentation that should be followed up in peacetime. We need a good pack that will ride on the hips and not on the shoulders; the experiments that the 4th Raiders made in hooking haversacks to their belts could probably be studied with profit. Possibly the Norwegian ski pack with the light aluminum frame that rode on the hips and strapped to the waist could be adapted to Marine Corps use. (The Army had such a pack for its mountain troops.) We need a light poncho, waterproofed but with the pores of the cloth not too tightly sealed against air circulation—something like a square of balloon silk (Egyptian cotton) 9 by 9 that could be stuffed into a pocket and that would serve as both tent and groundcloth.

THE FRAMEWORK OF THE PAST affords another start for any exploration toward new gear.

Our own country has a past of pioneering which developed, for example, the first useful rifle, and a variety of methods and equipment that could be used today by any body of troops priding themselves on their mobility off traveled roads. It is strange that we have adopted the Australian battle jacket, when we had the American hunting shirt (carefully discussed, by the way, in a recommendation for equipment for the Forbes expedition against Fort DuQuesne). It is curious that we have drifted over to canned or boxed rations of which delivery can be made only over roads, when we have the American fighting ration of jerked meat, salt and parched corn, which was palatable eaten raw and pleasant cooked. For the northern climates the Indians developed pemmican. Modern ingenuity, using powdered milk, sugar, or dried soups, could provide a ration that would be light, easily packed, and nourishing—one, moreover, that could be carried without discomfort in such quantity as would make a marine independent of a base for two weeks at a time. Finally, one could at least mention the tomahawk as tool and weapon.

Then there is the matter of reference to experts. It would be profitable before designing new equipment to find out precisely what the Maine guide thought was indispensable for a trip deep into the woods, what sort of knife the Malay carried in his jungles, where a knife was absolutely indispensable, what Fiala sold to the best of his arctic or South African explorers and hunters. During the war, we developed some experts in our own right, too; the 4th Raider Battalion, which marched the length of New Georgia; the lonely patrol at Gloucester which landed far beyond the beachhead and marched to meet our troops; the 2d Raiders, who were



**Our nomadic ancestors moved light and fast. Their weapons were serviceable, their clothes durable, their food good.**

30 days behind the enemy lines at Guadalcanal on Japanese rations.

Once basic designs had been worked out, they could be embodied in new substances, products of the last decade. Nylon fibers, for example, are impervious to water; a garment woven from such yarn would never become water-logged; it could be washed and dried in fifteen minutes. New resins that make woollens shrinkproof would put the old flannel shirt back into the field; plastics that were non-shatterable in the cold and not susceptible to mildew could be used as pliable fabrics for gear, or in rigid forms for containers; new alloys could produce tough steel that would not rust. The possible permutations are endless, but it is not the purpose of this article to go into them. It is written only to bring forward for discussion a subject curiously neglected.

US MC

# Devil Birds



## THE BATTLE FOR RABAU

SSgt Donald C. Buhrmann

✱ “SOON AFTER DAWN BROKE OVER THE Northern Solomons on the morning of November 1, 1943, U. S. Marines invaded Bougainville—the last and biggest Japanese stronghold in the Solomon Islands.

“As the night mists cleared from the Empress Augusta Bay, the sea-borne invasion force took form on the water below. For four hours before dawn, our Marine Ventura night fighter had patrolled over the task force without encountering enemy night bombers.

“Not a single Japanese plane appeared to challenge the landing during its vulnerable first daylight hour. During that time we had undisputed control of the air—with dozens of Navy and Marine Corsairs, Army P-39s, and New Zealand P-40s maintaining high, medium, and low cover over the shipping and ranging far out around the perimeter of the invasion area.

“At 0630, the lead transport bent the arrow formation and turned left to parallel the beach. By this time the incessant naval barrage lifted its line of fire and began shelling further inland. Finally, landing craft hovered close to the trans-

ports as marines climbed into them from cargo nets.

“A formation of Marine torpedo planes bombed the beachline. Douglas dive bombers followed. Immediately after, the first wave of LtGen Vandegrift’s marines hit the beach at Bougainville.”

So wrote a Marine correspondent covering the first phase of the “Cherry Blossom” operation from the air. During the early hours of the landing, brief but severe resistance was encountered from the Japanese defending Puruata and the Torokina area. The enemy made half-hearted attempts to reach the invasion area by air during the day, but were brushed off by Allied fighter

**By Capt John DeChant**

**Part IV: Immediately after the overrunning of Bougainville by the infantry, the combined air forces of the Marine Corps, Army, and New Zealand strike out at the Rabaul bastion. It took three months to neutralize the Japs**

cover which shot down 25 planes. A light enemy naval task force of 12 ships closed on Empress Augusta Bay during the early morning of D plus 1. It was routed with a loss of five ships.

By November 2, the assault phase of the invasion was over and immediate objectives had been taken. In the weeks that followed, the campaign progressed with an amazing lack of opposition from the sea and air. Marine fighter pilots had looked forward to the invasion of Bougainville as an aerial smorgasbord which would fatten up their kill scores. They expected far greater opposition there than the violent reactions of the Japanese Air Force over Munda and Kahili.

The largest of the Solomons, Bougainville is only 255 air miles from the bastion of Rabaul. There, on New Britain, the enemy had 600 fighters and bombers which might have disputed the invasion of Torokina and assisted counteroffensives by the 50,000 Japanese ground troops defending the island.

The Japanese land-based Air Fleet at Rabaul comprised nearly 300 naval planes which were supplemented regularly by 300 carrier planes from the Combined Fleet.\* However, the enemy naval air forces at Rabaul refused to do major battle over Bougainville and confined their constant attacks to night bombing. Presumably the Jap planes were being saved for the defense of Rabaul itself. Their aggressive spirit had certainly been broken.

The 16-month battle for control of the air over the Solomons from Guadalcanal to Kahili had proved a death-trap for 2,000 of their first line planes and pilots. Their network of air bases on Bougainville was now battered and inoperative. The pace and fury of Allied landings at Vella Lavella, the Treasuries, Choiseul, and Bougainville made the Japanese fearful of another imminent landing, perhaps even at Rabaul.

Though the Japanese day activity was nominal, their night bombing and strafing attacks did provide fodder for a new type of Marine squadron

in the Solomons—the night fighters. These shadow stalkers, with radar as their guide weapon in the night skies, were precise, scientific, aerial killers. An informal kind of night fighting had been attempted when men like Maj Joseph Renner over Guadalcanal and Maj Boyington over Munda tried using their day fighters to shoot down night intruders by moonlight or searchlight. Several Army pilots in P-38s were successful in shooting down night bombers with the aid of searchlights over the southern Solomons. But that method, at best, was haphazard.\*\*

During the early phases of the Munda campaign, VMF 531 (N), the first Marine night fighter squadron to see action, arrived in the Solomons and began experimental combat operations off Banika field in the Russells. It was a six-plane unit, flying the cumbersome PV-1 Venturas which the Navy had been using as a medium search and attack bomber. The Ventura's radar unit or dome was installed in a false fuselage nose. The plane carried an average crew of three; the pilot, a radar man who also doubled as a gunner, and a top turret gunner who joined in frontal firing and protected the plane against attack from the rear.

The basic control unit of VMF 531 (N) and other night fighter squadrons was the GCI or Ground Control Intercept station. Either ship- or shore-based, it was handled by a fighter director, and could operate, if necessary, as an independent radar and control station. Enemy night intruders were picked up on the GCI screen as bogeys or unidentified aircraft. Then the IFF (Identification Friend or Foe) homing signal was checked. If there was no reply, the bogey was considered an enemy plane. Its speed, altitude, and direction were radioed by VHF (Very High Frequency voice channel) to the plane in the air, which was then vectored (directed) as close as possible to the intruder.

When the night fighter was within two miles of his quarry, the intruder was picked up by the plane's smaller radar unit. Its radar man then

\*Japanese Army planes which had been active during the evacuation of Guadalcanal were withdrawn from Rabaul just prior to the invasion of Bougainville and 250 were sent to Wewak, New Guinea, the headquarters of their Fourth Air Army, where they were utilized in opposing the campaigns of MacArthur's troops.

\*\*The first night fighter defense in the Pacific occurred when half a dozen Brewster Buffaloes from MAG 21 at Ewa were sent to the island of Kauai, T. H., prior to the Battle of Midway in June, 1942. These planes operated as night fighter patrols for five weeks without making contact and returned to Ewa.



guided the pilot in closing the gap until visual contact was made.

Visual contacts by the pilot could be made even on black, moonless nights by using stars and clouds to outline the enemy plane. Once the intruder was sighted, the night fighter closed in for further recognition. If its silhouette and exhaust patterns indicated it was not a friendly plane, he opened fire with the .50 caliber guns mounted in the nose, aided, when possible, by the twin .50s of the turret gunner.

Commanded by LtCol Frank Schwable, who had been trained in night fighting techniques by the British, VMF (N) 531 had rough going during its early months in the Solomons. Air and naval commanders were hard to sell on the potential effectiveness of the new weapons. Schwable found it difficult to get facilities on forward fields and the cooperation of ship- and shore-based commanders in utilizing the services of his unit. In addition to constant troubles with the operation of the GCI station, the radar gear, and communications, Schwable and his squadron had a minimum of ground crew, spare parts, and margin for error. Their six planes were replaceable only in the United States.

SEVERAL WEEKS after the Marine squadron began its patrols, it was joined by VF (N) 75, a naval night fighter unit, flying Corsairs. The faster F4Us had a higher operating ceiling and on some occasions were assigned high-cover patrols while the Venturas handled medium- and low-cover missions. Until the appearance of these two squadrons, the enemy operated freely at night, with little to fear from antiaircraft fire and with increasingly serious effects on Allied ground and naval morale.

Although Schwable's squadron flew incessantly, covering the landings at Treasury and Bougainville, its first kill was not made until November 13. Capt Duane Jenkins, patrolling through scattered clouds under a full moon, was vectored out to intercept a flight of six Jap bombers headed for a naval task force off the Solomons. Coming out of a cloud bank, Jenkins spotted the enemy formation to his right and 1,500 feet below. Easing down, he crept in on the rear plane. His first burst set the Betty's starboard engine aflame. The other bombers broke off and hightailed for home as Jenkins followed his first bomber down in a shallow dive, raking its fuselage. A mass of flames, the Betty exploded as it hit the ocean.

Jenkins was killed in action several weeks later, after making his second kill. Fighter-directors put him on the track of a third intruder and then watched, helplessly, as the radar "blips" or tracks of the 2 planes merged in mid-air. No traces of Jenkins or his crew were found. It was presumed he had crashed into the enemy plane, thus destroying them both.

VMF (N) 531 moved its base of operations from the Russells to Barakoma Field and then to Bougainville. Schwable relinquished command of the unit with 72 missions and four kills credited to him. His successor, LtCol John Harshberger, finished his tour with four victories and 98 night missions. The squadron's total kill record in the Solomons was 12 planes. That was not startling by comparison with day squadrons' scores, but it was an unusual performance in the new night-fighter technique.

IN ONE SENSE, the Bougainville campaign was unlike any of the preceding invasions in the Solomons. Instead of a prolonged operation to wipe out all enemy resistance on the huge island, the ground forces were committed to capturing a small six by eight-mile beachhead in the Cape Torokina area. This foothold was to provide a forward air base which would bring the major Japanese installations at Rabaul within range of the fighters and light bombers.

The combined efforts of three Marine air commanders—MajGens Roy S. Geiger, Ralph J. Mitchell and BrigGen Field Harris—were major factors in the precision progress of the Bougainville operation and the subsequent move on Rabaul.\*

It was during the first weeks of the Bougainville occupation that the Marine version of precision close air support for infantry had its first major workout. Air infantry support had been used sporadically and effectively during the Guadalcanal and New Georgia campaigns, but not in the planned, scientific manner that utilized the full possibilities of immediate, direct, and close-bombing support for the ground troops.

Several months before the invasion, three air

\*Gen Geiger, air commander at Guadalcanal, took over both air and ground forces ashore at Bougainville after Gen Vandegrift was recalled to become Commandant of the Marine Corps. Geiger's command, the I Marine Amphibious Corps, was composed of the 3d Marine Division under Maj Gen Allen H. Turnage, the Army's 37th Infantry Division, and the 1st Marine Raider and Parachute Regiments. Also under Geiger was BrigGen Field Harris, serving as Commander, Aircraft, Northern Solomons. Harris, with his Forward Echelon, I Marine Air Wing, hit the beach on D Day with the assault troops and directed all air cover and air support missions at Cherry Blossom. On November 20, Maj Gen Mitchell became Commander, Aircraft, Solomons.





**Torokina Airfield on Bougainville. From this field Maj Gregory Boyington and his famous Black Sheep and VMF 215, ace squadron in the Pacific, attacked Rabaul.**

officers and enlisted men were attached to the 3d Division for air liaison duty. These officers, under LtCol John Gabbert, were Marine aviators familiar with the techniques of light-bomber aviation and general infantry operations. The enlisted men had received special training in using portable radio gear and in aviation communications.

An intensive air support school under Gabbert, the division air officer, was attended by officers from each infantry regiment and battalion headquarters. The main objectives of the experiments of the division were: improved means of target designations, exploration of the precise effects of bombs and their various type fuses, and the determination of safety margins necessary for the protection of friendly troops.

Col Gabbert used himself as a target for live bombs to determine an exact rule-of-thumb for the effect of their explosions on friendly troops. Without a fox hole or natural cover of any kind, Gabbert, in several experiments, squatted in an open field while planes dropped bombs of various weights at measured distances from him. He also utilized static explosions, standing at measured distances from bombs which he set off by hand. When he had completed his tests, Gabbert had proved that the "yard to a pound" norm

was correct. A 100-pound bomb could be dropped 100 yards from prone friendly troops without endangering them.

The first instance of close air support at Bougainville was on the morning of the invasion by Marine torpedo and dive bombers. As the landing craft headed for the beach, one division of planes hit assigned targets on Torokina Point, while others dropped strings of 100-pound bombs and strafed in the jungle and swamp area immediately behind the shore. The infantry reported that this air effort was "excellent," but not in sufficient strength and urged the use of heavier bombs.

The 3d Division made its second call for air support on November 9, asking that 18 torpedo bombers be on station over Piva Village the following day to soften up Jap positions prior to an infantry attack. Twelve planes reported at the requested time and contacted the air-liaison party. Friendly front lines were marked with colored mortar smoke and the bombers went in, laying their explosives within 120 yards of the marines. The target area was well covered by the first attack. The infantry push was immediately successful, as the Japanese had abandoned their positions, leaving behind much equipment.

During the next few days, a number of close support missions were ordered and carried out with excellent results. The torpedo bombers based at Munda were called upon to aid the infantry in an assault on "Hellzapoppin" Ridge. This particular assignment came close to failure. It was not until the second day of the support mission that heavier bomb loads than previously used were dropped accurately within 75 yards of our troops and the path opened for the infantry.

It had been the practice of some ground commanders to withdraw their troops several hundred yards to the rear while the close support planes bombed. This tactic was dropped when they found that the Japanese moved up and occupied abandoned positions before friendly troops could return. The enemy's own trick of withdrawing from their own front lines during an Allied bombing attack and then quickly moving back in was obviated by the use of dummy runs. By mixing up their live and dummy runs by prior plan with the troops, the TBFs and SBDs were able to keep the Japanese down and immobile while friendly troops carried out their advance.

The last calls for air support by the 3d Division were made on December 25 and 26 while straightening out the final lines of the perimeter at Hill 600A. The TBFs made two attacks on Christmas Day and one on the 26th against targets in the jungle which varied from slit trenches to splinterproof emplacements. Following the third strike, infantry patrols found the target area abandoned although it showed evidence of having been occupied by 800 enemy troops.

Although the Bougainville infantry-support missions were of the rudimentary type, they were considered by Marine air and ground commanders to be "well worthy of the designation—close support."

Supplementing their fighter cover, night-fighting, and close-support missions, the Marine air arm in the Cherry Blossom operation carried out the numerous other requisites of a tactical air force serving the infantry.

THE FIRST Marine photographic squadron (VMD 154), flying the naval version of the B-24 Liberators, provided initial photo intelligence prior to the invasion. As the fighting progressed, infantry observers flying in SBDs and TBFs over the front lines added further data. The light bombers served as flying artillery-spotter platforms and protected the ships in the unloading

areas from heavy enemy gunfire by remaining on constant patrol over suspected artillery emplacements. Munda-based bombers flew 750 such infantry missions until the SBDs on the new Torokina strip took over the duty.

SCAT transport planes made their usual quiet and significant contributions to the success of the Bougainville campaign in their specialties—air supply drops, evacuation of wounded, and the delivery of badly-needed cargo.

The Marine and Army wounded in the early weeks of fighting were taken out of Bougainville either by seaplanes (the Navy's PBY Dumbos) or by destroyer to Vella Lavella, where they were reloaded into the R4D transports and flown to rear-base hospitals. SCAT planes moved into the strip at Torokina the day it opened and took over the air evacuation task. During the entire campaign, SCAT transports of MAG 25 and the Army's 13th Air Force carried out 1,217 casualties and delivered 840 tons of high priority cargo, including parapack air drops at Choiseul and to advance assault elements at Bougainville.\*

### Humbling a Fortress

WITH THE BOUGAINVILLE perimeter barely secure, the Allied Air Force reared back without a pause, and stuck its head into the lion's mouth—at Rabaul. All prior air beachheads in the Solomons paled in contrast with the struggle that followed until the lion choked to death.

The Japanese captured Rabaul Town on 23 January 1942 from a small Australian ground and air force. Ensuing months were concentrated on developing the area into a land, sea, and air fortress. As headquarters for the Southeastern Fleet and the Eighth Area Army, Rabaul became the key structure of the enemy's empire in the South Pacific, and the major staging and supply base for their activities in New Guinea, New Britain, and the Solomons.

Simpson Harbor in Blanche Bay at Rabaul was one of the largest natural harbors in the Pacific. It was almost land-locked and capable of handling 300,000 tons of shipping. Utilized by the Southeastern, the Eighth, and the Combined or roving Third Fleets, Simpson Harbor was the base for enemy naval elements regularly composed of 10 cruisers, 20 destroyers, 10 subma-

\*During the first stages of patrol activities outside the perimeter, the knife-wielding jungle experts of the 1st Fijian Infantry Regiment cut across the Crown Prince Range and established a raiding base and tiny airfield at Ibu on the eastern side of Bougainville. SCAT planes flew regular air-drop missions to Ibu to keep the Fijians supplied with rations, ammunition, and medical supplies.



Marine torpedo planes (TBFs), bound for enemy shipping lanes in and around New Britain, taxi slowly up the line leading to the runway of Torokina airfield.

rines, and 20 small craft. Two hundred and twenty large transport and supply ships of the Southeastern Army forces were based there along with 500 small boats and barges.\*

Located in the shadow of six volcanoes, Rabaul was hedged by five airfields—Lakunai, Vunakanau, Rapopo, Keravat, and Tobera.\*\*

This Rabaul airfield network and its heavy complement of planes was the immediate target on which Gen Mitchell put his finger. Once enemy air power there was equalized, or eliminated, the light bombers could begin working on the airfields, the shipping concentrations, and finally the ground installations.

\*Enemy troop strength in the Rabaul-New Britain area in the fall of 1943 was approximately 100,000 men of whom 76,000 were Army forces.

\*\*The first two fields were captured from the Australians and expanded. Lakunai, immediately south of Rabaul on the coastal flats of Crater Peninsula, handled 90 fighters and 10 bombers; Vunakanau was a concrete strip, with revetments for 90 fighters and 60 bombers, located nine miles south of Rabaul; Rapopo, 14 miles southeast of Rabaul at Lesson Point, had a concrete strip and revetments to accommodate 94 bombers and 10 fighters; Keravat, 14 miles southwest of Rabaul passed from Army to naval control, but because of drainage problems was never operational; Tobera, also a concrete field and capable of handling 75 fighters and two bombers, was 12 miles southwest of Cape Gazelle. These air bases were manned by the 10,000 men and 600 planes of the 11th Air Fleet, a part of the Southeastern Fleet.

The answer to the forbidding Japanese air strength at Rabaul was the same as that of Kahili—the fighter sweep. It was five times the gamble it had been over southern Bougainville, but Gen Mitchell wasted no time in feints or preludes. He picked as sweep leader the expert, audacious Maj Greg Boyington, whose Black Sheep were back in the Solomons, operating off Barakoma field.

Maj Rivers Morrell, a Guadalcanal veteran, brought in VMF 216 to begin defense operations at Torokina on December 10 as the Seabees completed their short steel-matted strip ahead of schedule. On the morning of December 17, the Torokina taxiway opposite the field was sardined with a double line of nearly 100 Allied fighter planes—Marine Corsairs, Navy Hellcats, and the slow, gaudily painted P-40s of the eager New Zealanders. The lead plane, an F4U, pulled out of line and onto the apron. A green light blinked from the tower. The splay-legged Corsair rocketed down the field and out over Empress Augusta Bay. It was Boyington, off on the first sweep to Rabaul.

That first mission proved a disappointment as



**2000-pounders bound for Rabaul are lined up at Bougainville. Thousands of sorties were made against the Japanese stronghold by a continual stream of Allied planes.**

the Japanese continued their coy reluctance to fight. The P-40s tangled with 30 or 40 fighters a few minutes before the main sweep formation arrived. Six were shot down and two Allied planes lost, but Boyington failed to lure upstairs another 40 enemy fighters on the taxiways at Lakunai.

Boyington, on his return, argued vigorously that the first formation had been entirely too big, complex, and unwieldy. He outlined his own tactical ideas on Rabaul sweeps—they should consist of at least 36, but not more than 48, planes; the number of squadrons and plane-types participating should be limited to cut down the possibilities for confusion; the sweep leader should be where the first contact is expected to be made, whether in the high, medium, or low cover; the fighting should be kept in a compact area and not degenerate into small dog-fights over a wide area; a two-plane section was an unbeatable combat unit regardless of whether the

planes happened to be of the same type or squadron. Finally, Boyington insisted that aggressive action was paramount and that all fighters stay in the battle unless a very good reason required otherwise.

The second mission in Rabaul was to escort B-24s on a shipping strike. Again the Japanese fighters only picked at the bait. Four of them were shot down and four Allied planes were lost, two in a midair collision.

December 23d provided the first real air battle at Rabaul and a new technique which gave the answer to the enemy's refusal to employ its fighter strength. The first mission of the day was a heavy-bomber strike to be followed an hour later by a fighter sweep. The bombers were late and Boyington's stacked-up fighters arrived just as the B24s were retiring from the target. The fighters caught 40 intercepting Zeros flat-footed. In the ensuing fight, 30 of the 40 enemy planes were destroyed. The Black Sheep browsed



through 12 of them, Boyington getting four. His personal score was now at 24 and the 26-plane record of Foss was in danger for the first time in a year. As the clamor and tension rose, Mitchell sent Boyington a message of congratulations.

THE BLACK SHEEP commander made his next kill during a sweep over Rabaul on the 27th. Then spurting oil filmed his greenhouse. Three times, Boyington wound back his hood and hunched up out of his cockpit trying to wipe away the oil in the middle of a whirling dog-fight. He failed and came back to Torokina, down-hearted, with the comment, "What difference? I couldn't have hit an elephant in the backside with a bull fiddle."

Bad weather kept the sweeps out of Rabaul for several days, while Boyington, record-conscious for the first time, chafed at the delay. He was on his third and last tour, with only a few days left to beat the Pacific record.

He went back to Rabaul for the last time on January 3d. It was a morning full of tension on the field at Torokina. Boyington, bareheaded, stumped in and out of the ready tent in his grimy flight suit. Knowing the strain he was under, everyone kept out of his way.

Under the eyes of war correspondents, Boyington fire-balled his plane down the runway. Airborne, he circled slowly until the formation joined up. Then he led it off to Rabaul. Hours later, planes from the sweep came straggling back, alone or in small groups. They reported that it had been a hell of a fight, but had no word on Boyington. More planes landed. Then Matheson and Chatham of Boyington's own division passed the word that they had seen him shoot a Zero down in flames. That tied the ace-of-aces record. They saw nothing further except that Boyington and his wingman had then gone off after a flock of Zeros.

At dusk, pilots of the Black Sheep squadron flew in under a storm front and searched the Rabaul area until long after dark. That night, the islands heard the news that Boyington, the indestructible, was missing. Continual searches for days, then weeks, confirmed the report. Both pilots were given up for lost months later when the Japanese failed to report their capture.

A year went by and only the Black Sheep remembered Boyington's promise—whatever happened—he'd see them at that bar in San Diego, after the war was over.

He did just that.

Held as a secret captive and not posted as a prisoner of war, he was freed from Omori, near Tokyo, after the war had ended.

ENEMY AIR POWER at Rabaul held out for six frenzied weeks, as other Marines set an even wilder pace after Boyington vanished.\*

Crack Marine squadron in the New Britain melee was VMF 215, the Fighting Corsairs, commanded by Maj Robert Gordon Owens and paced by three of the highest-scoring Allied fighter pilots in the South Pacific air war.

Blond, India-born 1stLt Robert M. Hanson earned his Medal of Honor and title of the "One Man Air Force" by shooting down 20 Japanese fighters over Rabaul in a 17-day period. "Butcher Bob," as he was called by his squadron, had downed five planes in two tours before he went up to Rabaul. He had been shot down in one engagement over Bougainville while driving off six torpedo bombers attacking a convoy on D-Day. Then, on January 14th, he fought the first of a series of six air battles which made him the fastest of the superaces. Seventy Zeroes attempted to intercept a light-bomber mission attacking shipping in Simpson Harbor. Hanson picked out five enemy fighters and shot them down in flames in quick succession.

His next five missions to Rabaul netted him: One Zero, three Zeros, four Zeros, three Zeros, and four Zeros. Then, with 25 enemy planes to his credit and on the threshold of bettering the existing fighter record in the Pacific, the boyish and zealous Hanson crashed to his death in a strafing run at Cape St. George only a week before he was due to return to the States.

Cpts Donald N. Aldrich and Harold Spears found the air battles over Rabaul as much to their liking as had Hanson. Aldrich tied Lt Walsh's record of 20 planes shot down and Spears got 15 Japs before returning to the States, where he was killed in an operational accident.

The combined total of 60 planes shot down by Hanson, Aldrich, and Spears was a major factor in the four new Marine air records estab-

\*The Black Sheep squadron finished its second combat tour five days after Maj Boyington disappeared. Its two-tour record was 94 planes destroyed in combat. Of these, 92 were Jap fighters. The Squadron was credited with the probable destruction of 32 more planes in combat, damaging 50 others, and destroying 21 on the ground. The Black Sheep sank 4 small ships and 23 barges and strafed 125 enemy ground installations in the Northern Solomons, New Britain, and New Ireland for a total of 4,195 combat flying hours and more than 200 missions. Its losses were 12 pilots missing in action and six wounded.

lished by VMF 215 in the South Pacific. It was credited with:

- 137 Japanese planes shot down in 18 weeks of action.
- 87 planes shot down in one month.
- 106 planes destroyed in a single, six-week tour.
- 10 aces in the squadron.\*

☛ ONCE THEIR PLANES had been brought to battle by the bomber-fighter sweep technique, the Japanese at Rabaul fought back with all the unyielding vigor they had evidenced at Kahili. In the early weeks of the New Britain campaign, all available Jap fighters were sent up for interception of the Allied raids. At first the number of Zekes, Tojos, and Hamp interceptors (these latter two were new and improved planes) ranged from 50 to 200. The Jap fighter planes tried to remain in formation during the interception, but as their own numbers decreased and Allied plane strength rose, the Japanese were forced to resort to individual tactics.

The Japanese later admitted (in U. S. Strategic Bombing Survey interrogations) that they had a healthy respect for both American fighter tactics and planes. The most difficult maneuver the Japanese encountered was the "scissoring" or Thatch weave performed by Allied planes flying escort for bomber missions.

On their own missions, U. S. bombers flew tight-knit, unwavering unit formations as inseparable as those for which the Japanese were noted. Allied fighters covering the strikes had an inviolable rule—"Stay in formation and protect your bombers." Pilots who violated that creed to engage in separate fighter combat were severely disciplined by strike commanders regardless of any kills they may have made.

One new tactic which the enemy introduced into the South Pacific air war was the use of aerial burst or phosphorous bombs. Carried on the underbellies of fighter planes, the Japs used them by making a fast pass at an Allied formation, usually from head-on. The Zeroes pulled out of their high-speed runs sharply, flipping the bombs at the Allied bombers. They exploded, throwing out white hot streams of phosphorus to sear the bombers as they flew through the tentacles, and to break up the American formation to make its component planes better available to fighter gunnery. The burst bomb made few kills

and failed to break up Allied formations, so it was eventually discarded.

The typical Japanese pilot preferred to make his gunnery run on bombers from a frontal approach and against fighter planes from the rear. However, the inferior speed of the enemy fighters usually precluded a successful run on the rear of the Corsairs and Hellcats and they were forced to use the suicidal head-on approach.

The enemy's evaluation of Allied plane types was that the twin-engined P-38 and the slow P-40 were the easiest to shoot down once an initial combat advantage had been gained over them. The Corsair, because of its superior speed and heavy armor and armament was regarded as the best Allied fighter plane while the F6F, though not as fast as the F4U, was considered to be highly maneuverable and well adapted to combat.

☛ IN SPITE of the severe opposition, bad weather and the constant midday cloud cover over Rabaul, Allied fighter planes, at a price, beat down the size of the enemy air force and its will to fight more quickly than had been anticipated. During January 1944, Mitchell's airmen flew 28 major day missions and five large night attacks against Rabaul installations. Of the 740 Allied planes available, Mitchell's ground crews worked around the clock to keep 480 planes ready for combat at all times.

The Allied air drive against Rabaul reached its zenith during the first weeks of February when more than 3,000 sorties thundered over the base that was the anchor of the enemy's hopes in the South and Southwest Pacific. Then, on February 19th, Marine fighter pilots met their last major opposition from the Rabaul fields. Fifty Zeros rose to meet the incoming raid. Twenty-four were shot down at the cost of one Allied pilot. That battle marked the final death throes of what had been the once mighty air strength of the Japanese in the Bismarck Archipelago.

With excellent timing, a large American carrier force hit Truk on February 17. The damage was so severe that Japanese Adm Koga, Commander-in-Chief of the Combined Fleet, ordered all naval planes and pilots still at Rabaul to return immediately and reinforce the defenses at Truk.\*\*

\*\*On February 4, 1944, two Marine photographic planes of VMD 254 carried out the first successful photo reconnaissance of this highly secret base since 1941, returning with aerial photos which were instrumental in the success of the first American carrier raid on Truk. The two unescorted planes (PB4Y or B-24 type), piloted by Maj James R. Christensen and Capt James Yawn, battled freak tropical storms during most of their daring, 2000-mile mission and escaped aerial interception over Truk.

\*VMF 215 was the first Marine squadron to be awarded the Navy Unit Commendation.

Koga's order left the area without any semblance of organized air defense after February 25. In their 65-day campaign, Marine, Army, Navy, and New Zealand fighter pilots were credited with shooting down 695 of the 863 Japanese planes estimated to have been lost in the area. The balance were destroyed on the ground.

The complete collapse of enemy air power at Rabaul and in the South and Southwest Pacific by March 1944 marked the end of the air war in that area. In the long, bitter battle to destroy enemy air strength from August 1942 to March 1944, the Marines shot down 1,520½ planes or three-fifths of all the Japanese planes lost in air combat in the South Pacific.

With the annihilation of its air umbrella, Rabaul and the rest of the Bismarck Archipelago were ripe for further invasions which would complete the Allied strangle-hold of the area.

First step was the invasion of the Green or Nissan Islands which lie between Bougainville and New Ireland. New Zealand infantry landed on Green Island on February 15, under strong air cover provided mainly by planes of the First and Second Air Wings.\* During the assault phase in which light resistance ashore was encountered, the planes of VMF 212 shot down only six enemy aircraft.

On March 6, Lagoon Field, a 5,000-foot coral strip on Green, was completed and one week later, VMF 222 and 223 arrived to take over local defense of the area.

Encirclement of Rabaul was completed on March 20 when the 4th Marine Regiment (Reinforced) landed without opposition at Emirau Island, in the St. Matthias Group, only 75 miles from Kavieng. Again, the air-ground team in the landing was implemented by elements of the Forward Echelon, First Air Wing, under Col William L. McKittrick, who was designated as Air Commander, Emirau.

MAG 12 arrived at Emirau on April 5. MajGen James T. Moore took over the Air Command and relieved BrigGen Houston Noble as commanding general of the island. In the meantime, MajGen Mitchell had been replaced as ComAirSols by Army MajGen H. R. Harmon. Mitchell then took over as Commanding General, Marine Aircraft, South Pacific (MarAirSoPac), which had been established February 1, 1944, as the

\*One hundred and ten combat veterans of the Forward Echelon, First Wing, under BrigGen Field Harris, went ashore on D-Day to direct the air cover for the landing phase and develop the position as an air base.



**Bougainville mechanic turns over prop of Corsair to work oil up into top cylinders.**

senior Marine air echelon in the South Pacific. It was composed mainly of the First and Second Wings.

In the months that followed, there were a series of moves and command changes which concentrated the strength of Marine aviation at the northern air bases. The First Wing moved its Headquarters March 10 from Espiritu Santo to Guadalcanal and from there to Bougainville on June 8. In late April 1944, Gen Harris became ComAirSols and was relieved at the end of May by Gen Moore.

In mid-June, the Navy's ComSoPac command was disbanded and control of its units passed to Gen MacArthur in the Southwest Pacific area. ComAirSols was also deactivated and replaced by ComAirNorSols. This new but similar organization was commanded by MajGen Mitchell, who had served as ComAirSoPac from April until June. The Second Wing moved its Headquarters from Efate to Espiritu Santo on July 3, preparatory to an operation in another theater. The First Marine Air Wing, as a command and with a variable number of squadrons, remained on in



the South Pacific area until the end of the war.

The pressure of Allied air activity against the Bismarck Archipelago was seriously threatened during March 1944, when Japanese infantry remnants in the Northern Solomons gathered to make a wholesale counterattack on the Bougainville perimeter. The enemy admitted that from 15,000 to 20,000 troops were engaged in the abortive effort after having laboriously rounded up their scattered forces, moving them at night with few motor vehicles over battered roads, or by barge and jungle trail and carrying their few heavy artillery weapons piecemeal through the jungles from Buka and Kahili.

The immediate objective of the desperate attacks was to retake the Piva bomber and fighter strips which were less than a mile from the defense perimeter. A further thrust would make the original field at Torokina beach untenable and eliminate Bougainville, key link of the Allied air chain in the Northern Solomons.

Beginning on March 7, the Japanese closed on the perimeter in force and began shelling the airfields with such accuracy that the Piva fighter field was temporarily abandoned. While their fields, revetments, and camps were under constant shell fire, the Bougainville fighter and light-bomber pilots retaliated by harassing the enemy artillery positions and their troop concentrations with considerable success.

A major Japanese attack against the perimeter began on March 10. Army troops on the perimeter piled up Japanese dead along the barbed-wire front lines by the hundreds. Before the enemy broke off the attack in late March, they had suffered casualties numbering 10,000 dead and wounded. Of these, 5,000 later died of wounds, according to the commander of their forces, Gen Imamura.

**AFTER THE DISPERSAL** of the remaining Japanese infantry on Bougainville and with the opening of the air strips on Green and Emirau, the Marine air arm in the South Pacific settled down to the hard task of aerial strangulation of the by-passed islands. The first light-bomber strike on Rabaul was a disappointment. Cloud cover prevented sighting the target area. Two days later, a second mission was unable to find the target and dumped its load on the lighthouse and radio installations at Cape St. George on the southern tip of New Ireland. Marine bombers finally got through on January 9th and put the airfield at Tobera temporarily out of commission

while their fighter cover shot down 21 enemy interceptors.

Two more heavy raids failed to get at their targets. But on January 14, the break came when the dive bomber and torpedo planes struck shipping in Simpson Harbor while their fighter escort took on 70 enemy interceptors. A light cruiser, a destroyer, and seven cargo vessels were damaged by the bomber attacks. The Marines accounted for the cargo ships with nine direct hits. Twenty-nine Zeros were picked off by the fighter cover and five by the bombers.

The SBDs and TBFs caught eight cargo ships in the harbor on the 17th. The torpedo bombers bored in at masthead level and the SBDs dive bombed. Three of the AKs were sunk, two left in sinking condition, and three damaged. Thirteen Allied planes were shot down in the raid and only 18 enemy interceptors were destroyed.

Throughout the balance of January, the light bombers went to Rabaul with milk run regularity, flying as many as three missions a day. The novelty of hitting Rabaul wore off sharply in February as the heavy shipping disappeared and its fighter defense ended.\*

**PARTICIPATING** in the early phases of the systematic harassing of Rabaul was VMB 413, the first Marine medium bomber squadron. It started deviling the Japanese in March 1944. Flying PBJs off Stirling field in the Treasury Group, the squadron concentrated on precision night heckling.

Taking over where the day units left off, VMB 413 earned the title of the Flying Nightmares. One of their planes appeared over Rabaul just as the Japanese began their evening meal. It dropped several bombs and retired. Minutes later, it came in again, hundreds of feet lower. More bombs dropped and it circled away. This pattern was repeated until, on its last run, the plane strafed the target area. As the sound of its motors died away, the Japanese heard the second plane coming in on schedule to repeat the maddening process which went on night after night.

In spite of AA fire and tropical storms which took a regular toll of the squadron, it maintained the pattern of attack which was recognized in a letter of commendation from the Commanding

\*Airborne rockets were used for the first time by Marines when VMTB 134 loosed the 5-inch type against shipping in Simpson Harbor on February 17. In late April 1944, VMF 114 (Death Dealers) made one of the first experiments with the Corsair as a fighter-bomber in destroying a 450-foot bridge on New Ireland.



General, 13th Army Bomber Command, to which it was attached:

"You have . . . developed the dangerous, tire-some mission of night heckling to the highest perfection it has attained in the 14 months I have been working under ComAirSols."

Three more Marine medium bomber squadrons joined VMB 413 during the strangulation campaign and concentrated their strikes against targets on New Britain, New Ireland, and Bougainville.\*

☛ BY MID-SUMMER of 1944, Allied commanders felt that Rabaul, despite its potential strength, was lost to the Japanese and the Allied offensive by-passed it completely. For the rest of the war, however, it was subjected to a rigid aerial and naval blockade to continue its neutralization and weaken the will of its garrisons. Though a vast assortment of planes and services were engaged in this neutralization campaign, Rabaul was a major and unwanted problem child of Marine Aviation until the end of the war. Its squadrons flew 14,718 or more than half the total number of all Allied sorties against the New Britain stronghold.

Thirty-three Marine squadrons, a major portion of the Air Arm's strength in the Pacific, were involved in the Rabaul attack and neutralization phases. These units dropped 7,142,000 pounds of bombs for a third of the total Allied tonnage rained on that section of New Britain. The Marine array included 16 fighter squadrons (and one VMF (N) unit); eight dive bomber squadrons, five torpedo plane squadrons, and four medium-bomber units. These were aided by a complex assortment of Army, Navy, Australian, New Zealand, and Royal Indian Air Force units.

The Marine airmen, pilots and ground crews, who were shackled to the dull rigors of aerial strangulation in the South Pacific, resented their fate thoroughly and, perhaps, not without reason. As a land-based force they had proved second to none in spearheading the Solomons' campaigns and the Rabaul offensive. They could agree that circumstances, fate, and the old adage of "turn about, fair play" had something to do with their morbid fate, but it made them none the happier.

\*The Seahorse squadron (VMB 423) flew 1900 sorties against by-passed targets for the Australian II Army Corps which was engaged in mopping up the thousands of Japanese still on Bougainville in the summer of 1945. The unit flew 120 infantry support missions for Australian troops during one four-month period.

☛ AT WAR'S END, the Marine airmen still in the South and Southwest Pacific heard what they had long believed—they had bombed Rabaul too often. In the opinion of the Strategic Bombing Survey, "Our air attacks on these by-passed positions were often continued longer and in greater weight than was reasonably required or justified."\*\*

That hindsight reckoning was little consolation for the epidemic of dry rot they had been through, but the Marines knew they had accomplished a major share of the damage which the USSBS determined had been done at Rabaul by Allied air attacks:

(1) Elimination of enemy air power by destroying more than 800 planes and forcing the withdrawal of its air defense.

(2) Elimination of enemy naval power by sinking 20 fleet vessels of all types, damaging 23, and forcing evacuation of Navy units by February 1944.

(3) Destruction of 154 large cargo vessels, 70 small cargo ships, 517 barges, and 4 submarines in Rabaul waters; demolishing port installations and making 60 per cent of Simpson Harbor and 40 per cent of Keravia Bay unnavigable because of sunken wreckage.

(4) Inflicted at least 4,700 deaths on the enemy garrison.

(5) Knocked out 94 AA weapons and coastal guns.

(6) Demolished or burned out all important surface installations.

(7) Destroyed six radar units and a central Army radio station.

(8) Destroyed 884 vehicles of all kinds.

(9) Destroyed considerable quantities of all types of stocks including two-thirds of the Army's food supply.

(10) Weakened the over-all health of the command by destroying all of the original hospitals and more than 15 per cent of the area's medical stores.

At the end of their long trail of destruction, the survivors of the First and Second Marine Air Wings heard the testimony of Gen Hitoshi Ima-mura, 60 year old commander of the Southeastern Army Forces at Rabaul. It was a prejudiced tribute, but not too unlikely:

"We lost the Solomons' campaign because of your strong air force."

To be continued

\*\*The USSBS units covering Rabaul and the Central Pacific were headed by BrigGen Lewis G. Merritt.

# The Marines in the Pacific War

## Chapter 11

### THE MARSHALLS; OFFENSIVE IN HIGH GEAR

WHEN ASKED ABOUT THE PROJECTED WAR with the United States, the great Yamamoto had remarked that the Imperial Navy was confident that it could maintain itself victorious for two years, "But after that I don't know." The question, he continued, was one of industrial potentials. The U. S. was quite capable of building a very formidable fleet in two years' time, and peace should either be attained by that date or the Japanese position rendered secure against attack so that the development of the Southern Resources Area could be carried forward to the point where Japan's own industrial potential matched the American's.

Yamamoto was gone, shot down over the

Shortlands, before his two-year period reached its term, but the naval General Staff he left behind felt that nothing had happened in the interim to invalidate his preliminary estimate of the situation. They had always been a little

restive under "The Manchuria gang," as they called the men who seized power with Hideki

Tojo at their head; and in October 1943 they considered the time was ripe to bring pressure through the Jushin for the removal of the Premier.

The Jushin was one of those Japanese corporate bodies whose position it is so very difficult for an Occidental to understand—probably because it cannot be precisely defined. The word means Senior Statesmen; they were mainly ex-Premiers, nominally retired and without official position except that a few of them held memberships in the Privy Council. Nearly all were close to the Emperor, and their indirect influence was

*By Fletcher Pratt*

... the advance proceeded satisfactorily until a tre



**Part IX: The successful campaign in the Marshalls proves as never before the axiom that amphibious operations, seapower, and air supremacy are inextricably linked. Roi-Namur, Kwajalein, Eniwetok, Engebi, Parry fall, Truk is lambasted**

immense, especially on matters of broad policy. They had a tradition of always acting slowly, and only on the most elaborate and convincing evidence, which gave the greatest weight to anything they said. In preparation for an approach to this august body the Navy General Staff appointed a member of its Ministerial section, RearAdm Soichi Takagi, to prepare quietly a careful overall study of the war, with special relations to naval, aerial, and merchant ship losses, how they affected the development of the Southern Resources Area and the transport of supplies to metropolitan Japan.

In any policy where so much is done as a result of gossip it is impossible to keep an enterprise of this kind secret, and Adm Takagi had hardly begun his study before Tojo became aware of what was going on. His answer was only semi-political (in Japan military operations were politics and vice-versa); he ordered the organization of a series of amphibious brigades under control of the Army for the reinforcement of the outer islands of Empire. This would bring these islands, where the American attacks were falling, under Army rather than Navy command. It would also reduce the Navy's Special Landing Forces and Special Base Forces to the

tremendous explosion shook the whole Pacific . . .



role of subsidiary units; would require any reports from the battle areas to reach the Jushin and the Emperor through the Army; and would enable the Army to have more voice in controlling the movements of naval vessels and aircraft, since the security of Army troops would be involved.

The first of these brigades was naturally organized in the Manchurian Army, the source of Tojo's power. It had a foundation of infantry but an unusual number of mortar, machine cannon, and artillery units. It was unready at the time Makin and Tarawa fell, but after that double event it was at once sent out to the Marshall Islands, the activity with which the Americans were attacking these places from the air making it likely that their capture was the next thing on Pearl Harbor's agenda. The situation with regard to the aerial defense of the Marshalls was no better than it had been at the time of the Tarawa attack. Planes were lacking even for the reinforcement of the 24th Air Flotilla. But the reports from Tarawa were so eloquent about the value of fortifications that the 1st Amphibious Brigade was given a large allotment of concrete, steel, and other building materials, scarce though these were in the home islands.

☛ TO REARADM MONZO AKIYAMA, commanding the Marshalls region, it seemed obvious that the Americans would make their first attacks on Mille and Maloelap, the outermost atolls of the chain, in order to obtain tactical surprise. It was to these that the earliest arrivals of the 1st Amphibious Brigade were sent, together with the bulk of the construction materials and contingents of laborers. The movement was severely interfered with by American planes up from Tarawa and Makin, which attacked everything on the water. It became dangerous to send large supply ships further forward than Eniwetok. Their cargoes were either warehoused there or trans-shipped at once into small vessels of 100 tons and less, which stood a good chance of evading American aerial observation and would not represent heavy unit loss even if discovered. Several of the larger submarines were requisitioned for the transport of small-bulk, high-priority cargoes. At the atolls, underwater obstructions and beach defenses on the lagoon side received first priority. The fact that the Tarawa attack had come from this side was very astonishing, and since the Americans had gained their

objective by such a procedure, they would evidently try it again.

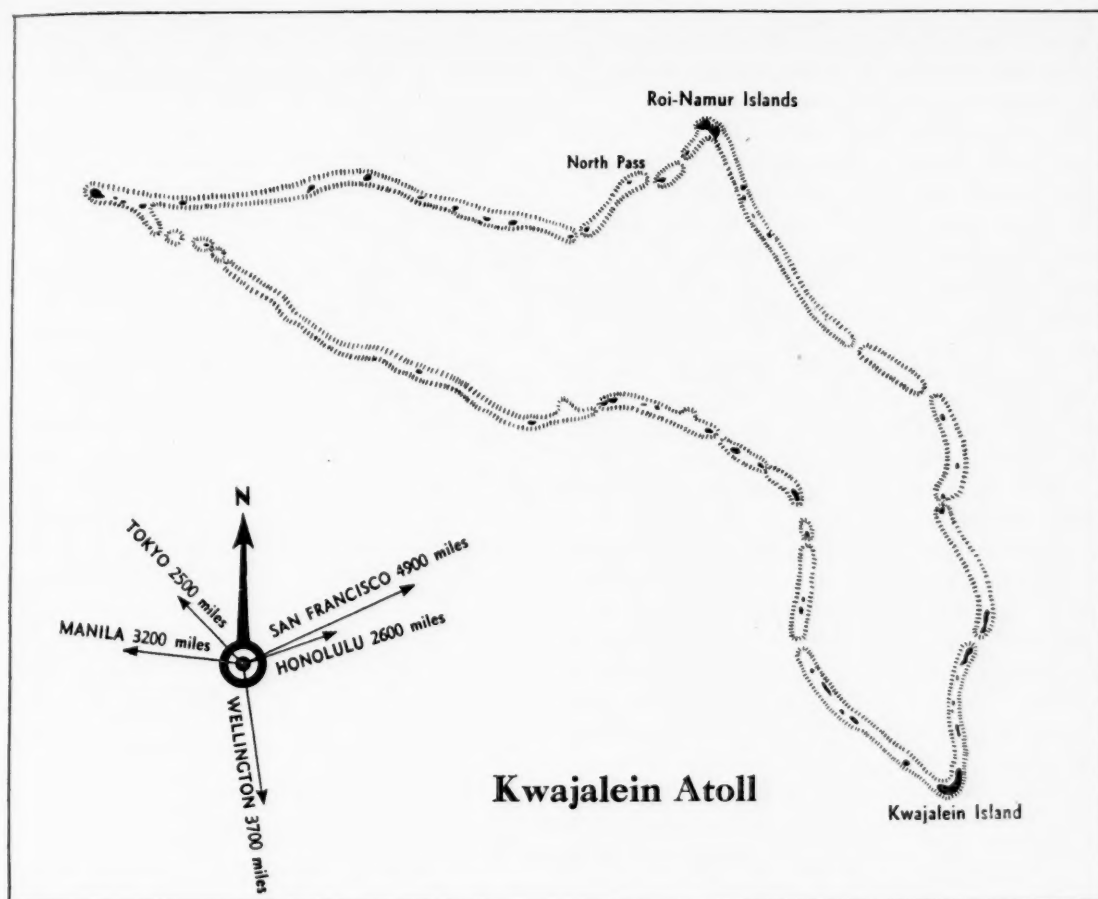
## II

☛ AS EARLY AS JULY of '43, while the fighting was still going on on New Georgia, Adm King's staff had sent through a general directive naming the Marshalls as the next point of attack following the Gilberts operation. This directive contemplated a break-through in the line of the eastern Marshalls, Maloelap, Jaluit, Wotje. But when it reached CinCPac, doubts arose. In a military sense this would be frontal attack, the most expensive and difficult form, the only advantage to be gained from it being surprise. Adm Nimitz' staff did not think the surprise would be particularly surprising if the operation followed that of Tarawa. They came up with the idea of attacking the enemy across his line of communications, at the rear atoll of Kwajalein.

This involved serious difficulties and Adm Spruance, who was in command of the whole operation, was the first to point them out. The march up would have to be made into a perfect maze of Japanese air bases and the amphibious forces off the beach must lie under aerial attack from all points of the compass—from Wake in the north, from Eniwetok in the northwest, the Carolines to the southwest, Nauru almost directly south, and the outer screen of the Marshalls to the east. At this date the Japs in the central Solomons were still staging strong counterattacks by air and no one at Pearl Harbor had any conception that their squadrons were in the shape that had led the Imperial Navy Staff to approach the Jushin. Spruance's objection seemed well founded and was passed on to Forrest Sherman, the flying admiral who had the old *Wasp* and had just come in as Nimitz' war plans officer.

He believed the Jap air bases could be neutralized. There would be two additional heavy carriers available by the end of January, when the Marshalls attack was to take place, *Intrepid* and the new *Lexington*; four more escort carriers; and four of the new light carriers, *Cabot*, *Monterey*, *Belleau Wood*, and *Langley*. Not counting the help of the Army's 7th Air Force, land-based, these should be enough to put such concentrations on Eniwetok, Nauru, and the eastern Carolines that the enemy would find it difficult to stage in any really formidable attack groups. By moving the fleet up the western flank of the Gilberts there would be land air cover from Funafuti and from the new bases to be seized at Tarawa and Makin.





The plan was set up on that basis although Spruance was still disposed to disagree a trifle. Gen Holland M. Smith's V 'Phib was the corps organization in charge. Kwajalein is one of the largest atolls in the whole Pacific, and preliminary intelligence reports indicated that two of its islands, Kwajalein itself at the southern end, and the double island of Roi-Namur on the north, were strongly held. Two divisions of troops were earmarked for the task of taking the atoll—the Army's 7th Division (MajGen Charles H. Corlett) for Kwajalein, the now-veteran outfit which had taken Attu in the Aleutians; and for Roi-Namur a brand-new Marine division, the 4th, under MajGen Harry Schmidt, in training at Camp Pendleton, California. This outfit's normal training was almost insensibly carried over into rehearsals for this special attack. The division had the usual three regiments of infantry (23d, 24th, and 25th) and one of artillery (14th). An extra regiment of marines, the 22d, not attached to any division, was to be held aboard transports in corps reserve and so was an extra

regiment of Army infantry, the 106th of the 27th Division. The total force for the expedition was thus two regiments larger than that for Tarawa-Makin.

In other respects also the lessons of Tarawa were taken to heart and worked into the plan as the day for Kwajalein approached. Submarine and air scouting had given a good picture of the atoll as the headquarters and central distributing point for the whole Marshall group and it had been noted that after Tarawa there were considerable troop movements into the region. Intelligence estimated that there were not less than 7,100 fighting men in there, a figure that might be run up to 12,000 by last-minute arrivals. They would have far less gunnery support than Tarawa, since the most careful screening of the Roi-Namur photos failed to reveal more than one coast defense gun (probably a 5.5), two twin-mount AA pieces, ten 37s, and 19 heavy machine-guns, with seven blockhouses and 30 smaller pill-boxes. But with so many Japs present who could hide in a hole in the wall, it was decided to take

no chances in the way of preliminary bombardment.

It was desirable to keep the carriers on the move and ready for the omnipresent possibility that the Jap fleet might come out or strong air squadrons be staged down through Eniwetok for a counterattack. Therefore the scheduled bombing was made less than at Tarawa but the total of naval bombardment was nearly doubled, and it was arranged that this bombardment be delivered in a two-day period of deliberate, observed fire against specific targets. Destroyers in close support had worked so well down in the Gilberts that three of these craft were assigned to move into the lagoon with the transports, getting close enough so they could spit in the eye of the enemy ashore; furnish both preliminary and call fire.

By the time the final plans were drawn, Tarawa was over and done. There the enemy had not come down in the air strength expected; and since in any case the success of the operation depended upon putting his supporting fields out of business, an operation lasting several days could be contemplated. There were dots of land flanking Roi-Namur on either hand. It was decided to take these in a preliminary operation, install the 14th Marines on them, and give the landing teams the immediate support of their own artillery in addition to all they got from the ships. There was no question of lack of time on this operation; land-based planes would hold off interruption if the carriers did not. The islands in question were Ennuebing and Mellu to the southwest of Roi-Namur; Ennugarret, Ennumennet, and Ennubirr to the southeast. One battalion of the 25th Regiment would handle the preliminary overrunning phase on the former pair with two battalions of artillery to follow, the other two infantry battalions to take the southeast group with again two artillery battalions coming in later.

☛ THIS ATTACK on the out-islands was for D day, 31 January, during all which day and the following night the ships were continuously to shell Roi-Namur. This method would leave the 25th Regiment in a convenient position to act as reserve for the other two, which were to go in next morning when it had become fully light, the 23d Regiment with two battalions abreast on Roi, the 24th in a similar formation on Namur. The two islands are connected by a causeway and are widely different in character, Roi almost com-

pletely occupied by a big airfield with its strips in a figure 4, so that all defenses were at the beaches or underground. Namur had a heavily wooded section, that might conceal traps, occupying its northeastern portion and a great many aboveground structures of one sort or another, supposed to be chiefly barracks and supporting installations for the airfield on the sister island.

☛ THIS TIME there were good tide tables, checked by submarine reconnaissance, but all the same there would be none of those Higgins boats so useful on the sand beaches of the South Pacific, so much a hindrance among coral reefs. There were 19 or 20 big LSTs in the task force; on their decks and in their holds they carried 110 amphtracs of a new organization, the 10th Amphtrac Battalion, with 44 armored amphtracs from another organization attached. They were to move into an area close off the northwest of Ennuebing, where there was a pass into the lagoon. There they would set the amphtracs into the water, with the armored vehicles carrying the artillery. All the night of the first day, while the outer islands were being conquered, the LSTs would hold position. As Higgins boats brought men from the transports farther out they would shift to amphtracs at the LSTs and pass into the lagoon for the main assault. Spruance had had tests conducted after Tarawa and was satisfied that an amphtrac was the only thing that could work across coral. A few of the new DUKWs were available but they were sent down to Kwajalein for the Army to try out, the Marines being doubtful about how their rubber treads would go with coral. Finally the TBY radios were for the most part discarded and Army type walkie-talkies were taken ashore for handling close-in communications.

As before, Adm Turner had the attack force working with the Army troops, down at Kwajalein Island. He led the old battleships *New Mexico*, *Idaho*, *Mississippi*, and *Pennsylvania*, with the heavy cruisers *Minneapolis*, *New Orleans*, and *San Francisco*, 12 destroyers, and the immediate support of the escort carriers *Natoma Bay*, *Coral Sea*, and *Corregidor*. The new battleships *Indiana*, *Washington*, and *Massachusetts* would work with him if not called away by the Jap fleet, as would Black Jack Reeves' carrier division of *Yorktown*, *Enterprise*, and *Belleau Wood*. At Roi-Namur, 50 miles to the north, the general operation was under RearAdm J. B. Oldendorf. The ships were *Tennessee*, *Colorado*,

and Maryland, the Marines' old friends, the heavy cruisers *Louisville* and *Indianapolis*, the light cruisers *Santa Fe*, *Mobile*, and *Biloxi* and 11 destroyers. The immediate support in planes came from Ragsdale's division (escort carriers *Suwanee*, *Sangamon*, *Chenango*). The detachment from the main fleet would be the fast battleships *North Carolina*, *Alabama*, *South Dakota*, and Montgomery's carrier group of *Essex*, *Intrepid*, *Cabot*. The firing areas were arranged so that while some units were giving flat trajectory fire others would be far enough out to let their shells fall plunging in on the anticipated roofed pillboxes. The two new battleships *Iowa* and *New Jersey* with other carriers *Bunker Hill*, *Cowpens*, *Monterey*, *Saratoga*, *Princeton*, *Langley*, and an array of heavy cruisers would roam at large under Willis Lee and Mark Mitscher to give support wherever needed or strike first at an interrupting surface enemy. All told, it was the greatest fleet ever assembled, with far more fire power than both enemies together had possessed at the Battle of Jutland.

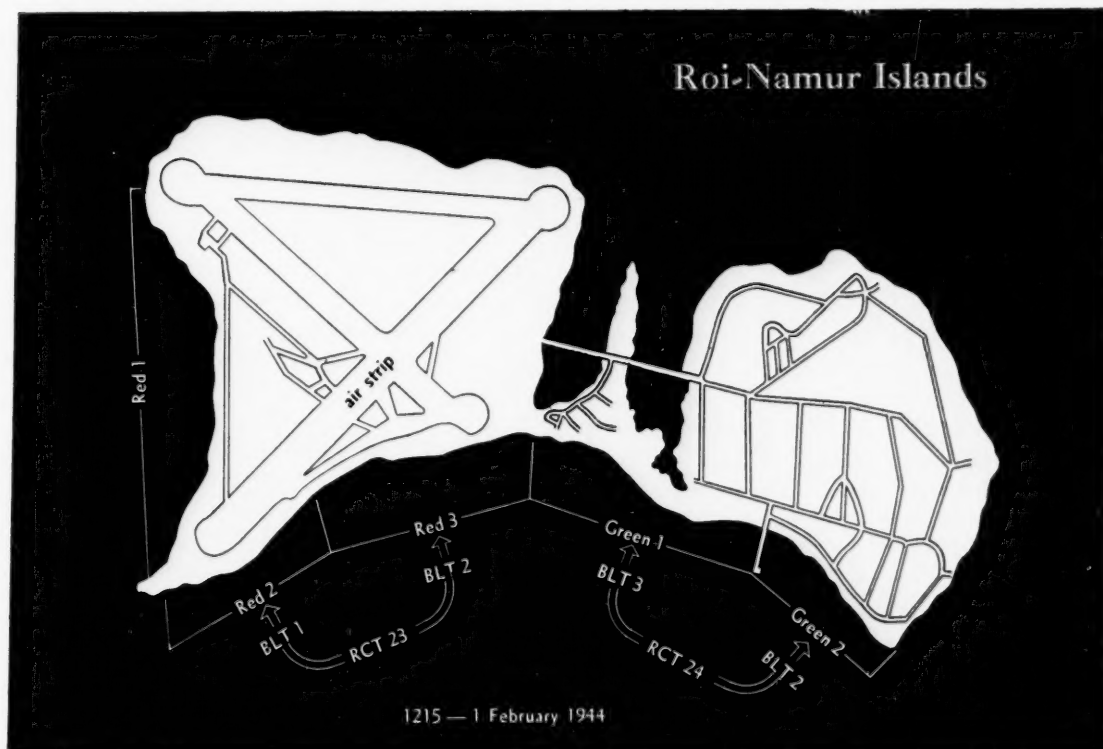
### III

BY THE TIME this plan was perfected, it was well into December and events had brought variations into the arrangements on both sides. The difficulty Adm Akiyama experienced in get-

ting his supplies and reinforcements forward to the outer atolls has been mentioned; it was mainly the reflection of an incident on 4 December when, with Tarawa secure, Spruance sent the fast carriers up for a flash raid into the Marshalls. They were intended to strike the airfields primarily, and did chew them up to some extent, with ten or more planes smashed on the ground. But as it happened the flyers arrived over Kwajalein simultaneously with a big convoy, the cruisers *Nagara* and *Isuzu*, half a dozen transports and freighters of large size as Jap freighters go. The planes jumped this juicy target, sinking all the commercial craft and hitting both cruisers, *Isuzu* so badly that she was unable to steer for days and lay in the lagoon a sitting duck if our people had only known where to find her. She was eventually patched up enough to get back to Truk but not till after the turn of the year.

Of course Akiyama whistled up all the planes in the Marshalls and during the dusk they made a concerted rush against the American carriers with the torpedo. One of them got a fish into the new *Lexington*, right in the stern, almost the same way *Independence* had been hit two weeks before, few casualties and no serious damage but she was out of the campaign. They paid 63 aircraft for it.

Akiyama got off a report which led Tokyo to



produce a bulletin saying that the current Roosevelt-Churchill conference had been called "to cover up a disastrous naval and air defeat in the Pacific. The enemy is hiding an acute dilemma in his heart;" and had lost four carriers. The real effect on Japanese planning was that Akiyama became very nervous about the situation at Mille and forwarded to it at once all the troops that had come in the December 4 convoy. This brought it about that he had only 2,900 men left on Roi-Namur and 5,600 on Kwajalein as of New Year's day, 1944, when the air attacks from the Gilberts became so intense that he could bring no more in. The Roi-Namur men belonged to the 6th Base Force (Naval) and the 61st Naval Guard Force, with the ground crews of the naval air group normally stationed there, including a very high-striped vice-admiral, Yamada of the 22d Flotilla. The freighters had not been unloaded when they were hit and part of their cargo was concrete mixers, so that work on the new fortifications did not proceed as rapidly as planned. Even his division of six submarines Akiyama could not use. They were requisitioned by the Army to carry supplies to the outer atolls, the military leaders complaining bitterly that the Navy's supply arrangement was so defective it had been necessary to make the soldiers out there grow gardens, just as though they were common laborers.

THE OTHER CHANGE in the situation was precipitated by Spruance, who sent Adm Lee down to Nauru with the six fast battleships between operations. The place had been air-bombed repeatedly but it didn't seem to do much good. The Japanese always repaired the damaged runways in a few hours and they could fly planes out from the Carolines without difficulty. A pair of carriers (*Bunker Hill* and *Monterey*) accompanied Lee to provide air cover; it was good enough to give him complete surprise so that on the morning of 8 December the Japs woke up to a breakfast of 16-inch HC\* ammunition. The battleships steamed slowly back and forth for a couple of hours. When they got through, the shop installations of Nauru were so thoroughly wrecked and so many of the personnel killed that although an occasional scout continued to come from Nauru, the island was never again a factor in the war.

This indirectly produced two last minute changes in the American plan. One was for

Adm Oldendorf to take *Louisville*, with the three light cruisers of the Roi-Namur group and six destroyers, up to Wotje on 30 January, D minus one, to see what could be done about the big airfield there. The ships pounded it hard, but *Anderson*, a real hard-luck destroyer, got in close enough to be hit by a 5.5, which burst right in CIC,\*\* killing her skipper and five others and wounding eight. The other alteration was a definitive plan for the seizure of Majuro atoll at the center of the Maloelap-Jaluit-Wotje triangle as a fueling station and anchorage alternative to Kwajalein for future operations. The desirability had been recognized during the early planning in July, as Majuro has one of the best anchorages in the Pacific, while Kwajalein is full of coral heads. But there had been some question about keeping Jap air away from two bases at once. With Nauru out of the running Majuro became possible and the reconnaissance company of the V Amphibs was sent down aboard the *APD Paine* to settle the conflicting reports on whether the atoll were in Japanese occupation or not. If so, it could not be by many of the enemy; a battalion of the 106th Regiment was assigned for occupation, the cruiser *Portland* for gunnery support, and a pair of escort carriers to furnish air.

With these alterations in the lines the curtain was run up on the main show. Up to now all American operations had been peripheral, to secure points of lodgment on the outer glacis of Empire. Now the assault on the main ravelin had begun.

#### IV

THE RENDEZVOUS was near Hawaii on 26 January. The fleet cruised wide to the south of the Marshalls, refueled, and came up west of the Gilberts. The fast carrier group split apart; Reeves' *Yorktown* group to Tarao, Ginder's (*Saratoga*) to Wotje, Montgomery's (*Essex*) to Roi, and F. C. Sherman's (*Bunker Hill*) to Kwajalein. Off Roi-Namur at dawn of D day the transports and LSTs moved to their assigned areas and marines lined the rails to watch the low-lying pencil lines of islands in the distance, looking like bald heads that still held a few vestiges of cocoanut palm hair. The double island was smoking and battleships were striding up and down to the north, hammering away after a fashion that caused the comment: "Taking their time about it, aren't they?" They were; and for

\*\*Combat Intelligence Center, the brains of a modern warship, to which all information is relayed in battle.

\*High capacity.



the most part firing by observation.

The APD *Schley* had pushed into the lagoon the night before and landed an underwater demolition team which established that neither Ennuebing and Mellu, nor Roi-Namur itself, had any trace of offshore obstacles. The Ennuebing-Mellu landing would be from the sea side. There was trouble at the start; there had been no opportunity to practice such an unloading and it took a lot longer time to transfer men from the Higgins boats to amphtracs than had been anticipated by guesswork. The swell was heavy, the amphtracs rolled and drifted, they took long minutes to get into formation and it was 1000, an hour behind schedule, when the men of the 1st Battalion, 25th, hit the beach of Ennuebing. On Mellu the attack was still later, there had been such heavy surf on the northern flank of the island that it was impossible to land there as planned, and the boats had to circle south. But the destroyers provided good fire cover and there were not many Japs on either island in any case. Hardly a man was hit when at 1035 Ennuebing and a little later Mellu were reported secure while the artillerymen began to sweat over mounting their pieces.

☛ THE SECOND WAVE, for Ennumennet and Ennubirr, was to leave at 1130, but now came more grief. The first group of amphtracs had been very slow getting rid of its troops at the beach; not all of them had returned to the LSTs and some of those that did return had trouble finding their parent ships since there was no means of identification. To cap it all, the destroyer *Phelps*, which was supposed to be control ship for the amphtracs, marking their line of departure, was suddenly called by fleet command to run down southward through Mellu Pass and cover a group of minesweepers going into the lagoon. She transferred functions as she went past by megaphone to a subchaser carrying BrigGen James L. Underhill, in charge of landing operations. Few of the amphtracs heard this, practically all their radios had gone out of business early (like the miserable TBY they were not waterproof) and the subchaser had no good radio anyway. Most of them accordingly pursued the destroyer toward what they thought was the new location. The total of these mischances was that the attack on the two islands east did not reach its beaches till 1515. But once more the delay was cancelled by good preparation fire and light resistance and both small islands were overrun by 1628.

Meanwhile, an order had come through from RearAdm R. L. Connolly, "Close-in Connolly," commander of amphib for Roi-Namur, that Ennugarret would be attacked at 1600 as it was important to take it that night and post the Marine artillery into close supporting position. It could not be done on that basis; not all the men were even landed on the first two islands from amphtracs when the order came through, already after 1600. When they had landed, the amphtracs insisted on pulling out at once for a rendezvous with the LSTs on the east side of the lagoon under orders from their own battalion commanders.

Gen Underhill had almost no communications since the radio sets of his subchaser had now begun to go out of order, but he managed to keep five of the amphtracs under his own command, and through a night running pencils of fire in all directions, overloaded them with marines for the short haul to Ennugarret, which was secure by 2000. Out in the lagoon the LSTs had failed to show identifying lights and some of the amphtracs were in vain hunting for their mothers. Occasionally one would run out of gas or develop motor trouble and then it usually sank; an amphtrac needs to keep going to stay afloat. Alongside other LSTs weary amphtrac men, who had already been laboring since dawn, were trying to get their vehicles oiled or otherwise serviced—not with much luck, for the LST skippers stood on Navy dignity and refused to allow the Marine amphtrac men so much as a cup of coffee. It was one of the curious command problems that arise in amphibious war, fundamentally stemming back to the question of whether an amphtrac is a sea-going or land-going vehicle.

## V

☛ DESTROYERS HAD FIRED on Roi-Namur through most of the night, more to keep the Japs on edge than for direct effect. At daybreak, Close-in Connolly brought his battleships and cruisers to 2,000 yards (*Louisville* was even hit by a ricochet) and took up the battering again, while the LSTs of the attack wave lined up in the lagoon and prepared to discharge their cargoes. Officers with glasses could make out that many of the pillboxes sited to fire from flank along a beach barricade resembling that of Tarawa had been knocked out by direct hits. Dive bombers came in; some of them had 2,000-pounders and some had depth charges, with which they effectively leveled most of the remaining forestation

on Namur; fighters came over and dropped belly tanks of gasoline which made not bad incendiary bombs.

H hour had been set for 1000, but there was a stiff breeze, the water on the lagoon was rough, and there was the same trouble as on the previous day in getting the amphtracs assembled at the line of departure. Everyone became cross and jumpy as H hour was set back to 1100, then to 1200, and finally 1215; but this time communications worked perfectly, naval gunfire and planes were on call and delivered when wanted.

✿ AT 1215, then, they hit the beach. A few pillboxes remained in action and opened up; a few marines were hit as they launched out on the beach of Roi, but surprisingly few. They began working rapidly across the devastation of the airfield inland. There were live Japs in there all right, most of them in the drainage ditches of the field or in hideouts of a new type "spider holes," which were merely depressions in the ground covered with palm fronds. The enemy practiced the usual Jap trick of letting the first group go by and firing into the second. From the drainage ditches they could be extracted only with bangalore torpedoes, and the green men of the 23d Regiment became trigger-happy, firing at anything and everything till they were quieted down. But the resistance as a whole was insignificant. Most of the enemy were dead, those caught alive had idiot expressions and fell asleep when placed in boats, their nervous organization completely destroyed by the red rain that had fallen on them for days. By 1315 the 23d had reached its reorganization line, with some difficulty holding back the attached tanks that wished to push farther without orders. By 1530 the regiment was jumping off for the conquest of the remainder of the island and by dark this was complete except for mopups of the few Japs still scuttling around the drainage ditches, and for the problem of disposing of the enemy dead, a very serious one, since many had been killed in the early bombardment and had ripened considerably under the tropic sun.

Namur was a more serious proposition, as might be expected from the nature of the cover. The 2d Battalion, 24th, went in on the right, the 3d on the left. Both were bothered a good deal by the shortage of amphtracs and after they reached the beach, both were bothered still more by the fact that the amphtrac men insisted on

firing over their heads at nothing. Resistance at the beach was minor, but just above the waterline a big antitank ditch kept the amphtracs from penetrating as planned and the men had to push along on foot. They encountered spider holes as on Roi, and these were hard to locate because the whole ground was littered with torn trees from the bombardment. There were also pillboxes and blockhouses still in action and any number of Japs concealed in the ruins of their buildings, keeping up an active fire. The action was of the usual type against such defenses, the attackers crawling in with satchel charges while others covered them. The advance was proceeding in a satisfactory manner when at 1245 there was an explosion that seemed to shake the whole Pacific Ocean.

✿ THREE THOUSAND FEET up an observation plane from *Colorado*, which had been planting 16-inch shells ahead of the advance, was shoved flatly sideways in the air. The aviator saw a mushroom of smoke and flame shoot past him into the skies, spotted with debris, and with a shock realized that part of the debris consisted of an entire palm tree, root and head. Ashore at least 20 marines of the 2d Battalion were killed, another 80 wounded, and all the rest more or less stunned. Later it was discovered that the main magazine of the island, loaded with torpedo warheads, had gone up in that gigantic blast. Why? There are various stories—one to the effect that some marines had crawled on the roof of the structure, dug a hole through it and tossed in a grenade under the impression they were dealing with another blockhouse; but the men of *Colorado* insist that it was an armor-piercing shell from that ship which did the business.

It does not matter; what does matter is that although more Japs than marines were killed in the big bang, 2d Battalion was set back on its heels by the jar, followed at short intervals by two more that would have been gigantic but for the one that preceded them. Col Franklin A. Hart of the regiment decided to commit his reserve battalion. These men hit the beach late in the afternoon, when the 3d Battalion had already reached its phase line, but there was a delay in getting tanks ashore and not until 1730 could the advance be taken up again. When it was resumed, a maze of ruined buildings and pillboxes was encountered with many live Japs. Night came down to find the regiment still a quarter mile from the north peak of the island. The order was given to dig in.



Carrier-based planes, headed for northern end of Namur Island on a close support mission, roar over dug-in marines. Resistance on Namur was heavier than that on Roi.

Twice during the night the Japs tried small counterattacks and on 2 February the marines found they had to go back to many of the pill-boxes already conquered, which the obstinate enemy had reoccupied. But by afternoon of that day the island was won, the 1st Battalion losing its lieutenant colonel, Aquilla J. Dyess, in the process. The only other accidents were that the unfortunate *Anderson* ran on a coral head and twisted her screws, while 23 of the amphtracs sank.

The cost had been 190 killed, 547 wounded, total 737; of the enemy 3,742 were killed, 99 idiot Jap prisoners taken, and 165 Korean laborers. Adm Akiyama was killed down at Kwajalein, where the 7th Division encountered more of the enemy and took more time. Despite the difficulty over the amphtracs, which showed plainly the need for better training and control of these extremely useful vehicles (down at Kwajalein Island the Army had placed its amphtracs in charge of a regular tank battalion and had no trouble), it had been the easiest and least costly conquest of the Pacific war. The reasons were clear enough—the strategic surprise which brought the attack down upon that one atoll of

the whole Marshall group least prepared to receive it; the crushing, accurate naval bombardment that reduced the defense to a few isolated knots of men. "Maybe we had too many men and too many ships for the job," said Richmond Kelly Turner when it was over, "but I prefer to do things that way. It saved us a lot of lives."

The system of dealing with island defenses had been discovered, our people told themselves in a mood of legitimate self-congratulation; and Pearl Harbor sent through a suggestion that since Roi-Namur had been taken so much more rapidly and at so much less cost than anticipated, it might be a good idea to attack Eniwetok in a week or less. Majuro had been in the meanwhile captured in an incidental manner without a man being hurt; construction of the airfield there began on 3 February.

## VI

ABOARD THE CARRIER *Saratoga* they got out a skit during the middle days of February. It was a glimpse into the future, date uncertain. The carrier and her companions of Adm Ginder's group (*Princeton*, *Langley*) had been working on Eniwetok for these many years, according to the document; seniority had brought all the en-



listed up to chiefs and warrant officers and all the flyers up to rear-admirals with long beards. As RearAdm Gish lands he reports to the vice-admiral in charge of air intelligence that the Japanese are still in occupation of the atoll; there is an outhouse standing.

Aboard the ships of the group they felt out of things. After Kwajalein it was clear to everyone, including the Japanese, that Eniwetok would be the next point of attack. It had a good airfield on Engebi Island at the north flank of the circular coral formation; and of all the atolls it was the only one through which planes could be fed from either the Empire or the Carolines into those Japanese positions among the eastern Marshalls, now converted into agricultural projects by American ships with their bases at Kwajalein and Majuro. If Eniwetok were taken, if our land-based air were established there, the Imperial atolls would be permanently innocuous, the forces in them permanently immobilized. The American fleet would be set free for any operation its commanders chose to undertake.

It was also evident that for some reason at which our high command could only guess (they were very far from imagining the Japanese situation in carrier pilots to be as bad as it actually was), the enemy either would not or could not commit major forces to the defense of Central Pacific islands at this particular time. The capture of Eniwetok was thus merely a question of applying readily available forces to produce an important result—if it were done soon, before the strategic situation or the Japanese mind had altered. This was why Adm Nimitz had indicated to Adm Spruance that he would like to have the place attacked right away.

ADM SPRUANCE EXAMINED the refueling situation and the reports on Kwajalein and replied, no, he didn't think it could be done that way. It was only on 2 February that the decision had been taken to go to Eniwetok. The V 'Phib Corps reserve that had not been used at Kwajalein (106th Army Regiment and 22d Marines) would carry the ball and RearAdm Harry Hill would have the overall command. It was 4 February when the conference was held aboard the command ship *Rocky Mount*, with Adm Turner, Adm Hill, and Gen Holland Smith present to lay down the general lines of the plan. That plan now required to be broken down into details by the staffs involved, and something had to be done to obtain better function from the amphtracs, all of which would take time. In

the meanwhile, however, here was the fleet, Task Force 58, two fast battleships (*Washington* and *Indiana* had been in a bad collision and were not available), 12 fast carriers, fully refueled at Majuro and with Marc Mitscher champing for action. Adm Ginder's detachment would not reduce this force by much and the old battleships and cruisers of Harry Hill, destined for the Eniwetok attack, would not reduce it at all. Spruance proposed to attack Truk.

IN THE LIGHT of subsequent events it is hard to realize how terrifying an enterprise an assault on that mysterious and formidable place of arms seemed at the time. The skipper of *Essex*' Air Group 9 has said that when he heard where they were bound "My first impulse was to jump overboard"; and he was a man who had seen a lot of war at its worst. The place was stronger than Pearl Harbor, a huge atoll enclosing a variety of islands supplied with airdromes above ground and underground, armed to the teeth with anti-aircraft and coast defense guns, any number of supporting planes, the major Japanese naval installation of the world. No white man had been there since the days when it belonged to Germany; and out from it for two years had flowed the tide of the war against us.\*

To it Adm Kondo had returned with his 2d Fleet units after the futile sortie into the Marshalls while Tarawa was being taken. When a pair of B-24s led by Marine Maj James R. Christensen flew over it at 24,000 to take pictures on 4 February, the ships were still there, two carriers among them, secure in their defenses. The operation was an attack on a major fortress with a naval battle to be carried on simultaneously.

Or was it? Our submarines had been around the secret terror since the beginning of the war. *Skate* sank a torpedo into the battleship *Yamato* there in December and *Guardfish* knocked off the destroyer *Umikaze* as she was trailing a con-

Continued on page 57

\*Actually, Truk was a good deal of a falseface, like most bugbears. The place had never been a true major base, only an anchorage where there was no refuelling dock, and most of the ship installations were for servicing submarines. Up to the beginning of the war it was not even very much fortified, and ViceAdm Hara, who commanded the place, has told how he used to get "the South Sea blues" when he heard American radios describing it as impregnable. During 1943, quite a lot of artillery, chiefly antiaircraft, was moved in, and the place had never been so strong as it was on the day of Adm Spruance's strike. He ruined it; the above-ground installations were almost completely destroyed, so were most of the ammunition dumps and the fuel storage; and since it is composed of a number of islands, the place was badly pinched from that time forth by the destruction of all the barges and sampans in the harbor, which there was no means of replacing. For a more complete story of Truk's defenses read *Truk Was a Phony* by Gilbert Cant in the October GAZETTE.



# DETACHMENT OF REPORTING SENIOR

NAVMC 652-DP

## REPORT ON FITNESS OF OFFICERS OF THE UNITED STATES MARINE CORPS

(To be submitted in accordance with Art. 137, U. S. Navy Regulations, 1920, and Art. 10-22, Marine Corps Manual)

**RICHARDS, Henry Oscar** (0308-2) First Lieutenant, U. S. 1  
(Name Surname) (Grade)  
Ship or Station: Company 1st Battalion 1st Marine Regiment  
Period covered: 2 mos 27 days months, from 4 January 1947 to 31 March 1947  
To be answered by officer reported on:

1. Regular duties ..... **Platoon Commander**.....
2. Additional duties ..... **Company Recreation Officer**.....
3. Wife's address ..... **Broad Street, Gibbstown, New Jersey**.....
4. Name, relationship, and address of person other than wife to be notified in case of emergency.....

**Norvil RICHARDS (Father), Broad Street, Gibbstown, New Jersey.**

*Henry Oscar Richards*, 1st Lt. U. S.  
(Signature) (Rank)

To be answered by reporting officer:

5. Reporting officer ..... **Ralph N. Renshaw**, LtCol U. S. M  
(Name) (Rank)

6. Method of rating.—When rating this officer, consider carefully and keep in mind the following definitions, t

7 YEARS AGO THE MARINE CORPS DECIDED that promotions based entirely on longevity left something to be desired. It was felt that some system must be devised that would gradually eliminate those officers who could not keep pace with their contemporaries. The present system was the out-

growth of their efforts. When selection boards meet they base their selections primarily on the information contained in the fitness reports on file. These same fitness reports are also used for the assignment of officers to duty as well as the regrading of probationary officers. Since the fitness report carries such weight in influencing our careers, it behooves us to analyze it closely to see if it is free of flaws.

Note: It is suggested that the reader provide himself with one of the fitness report forms now in use, pink sheet N.M.C. 652-A. & I., before reading further.

Upon close scrutiny the following flaws in the present fitness report form become readily apparent:

(1) Exactly the same form is used in peacetime as in war, yet the standards during war must differ of necessity, due to the rapid expansion of the Corps that in-

variably occurs. An entirely different type of form should be used for the two periods.

(2) No space is provided on the form for the officer being reported on to state his preference for duty upon termination of his current tour. This necessitates that a letter be written to the Commandant which involves needless paperwork for the office preparing it and additional work in handling at Headquarters.

(3) That portion of the form which is required to be typed is very difficult for the clerk to prepare accurately because there is nothing on the form to indicate:

By LtCol Edward H. Drake

7. Before  
report  
made  
Decision  
grade

8. Con-  
sider-  
ation

Perform

- (a)
- (b)
- (c)
- (d)

(e) Handling officers

(f) Handling enlisted men

(g) Training troops

(h) Tactical handling of troops (unit appropriate to officer's grade)

|   |  |  |   |  |
|---|--|--|---|--|
| X |  |  |   |  |
|   |  |  | X |  |
|   |  |  | X |  |
| X |  |  |   |  |

(a) Occasion for the report; (b) that the officer's full name and file number are required; (c) that the letters "R," "WR," "NA," or "NAVC" may be required after the letters "USMC" which appear on the form; (d) that time in transit must be shown on the form if the officer has joined from another organization during the current period; (e) if the officer's regular or additional duties changed during period covered that appropriate dates must be shown; (f) insufficient space is provided on the form to type in all that is required in many cases without undue crowding and use of unauthorized and frequently misinterpreted abbreviations; (g) that an "R" or "WR" may be required after the letters "USMC" on the signature line; and that the short line marked "date" on the back of the form means "date forwarded." These are only minor changes that need to be made but they very often make the report inaccurate unless carefully checked.

(4) Paragraphs 6, 7, and 8 are not in logical sequence. It seems more nearly the normal mental process to select the ideal first, then read the method of rating, and lastly, rate him. However, this point is merely a matter of opinion. But in paragraph 8, the form fails to bring home to the reporting senior the degree of importance that should be attached to the task before him—both from the standpoint of the officer being reported on and the Marine Corps. This is essential. The subparagraphs (c) "Administrative Duties," and (d) "Executive Duties" in paragraph 8 are superfluous since it would be extremely difficult, if not impossible, to rate an officer on his "Regular" and "Additional" duties without considering the above two at the same time. These markings become doubly meaningless when the officer being rated is the executive officer of the organization.

(5) In paragraph 9 the wording of most of the qualifications upon which an officer is marked are not as complete as they should be, nor are there enough qualifications listed upon which to accurately classify an officer. In addition to those qualifications the following should be added: Dependability; Ability to get Results; Justice; Professional Knowledge; and Interest in his Profession.

(6) Paragraph 10 fails to show that any adverse comment will render the report unsatisfactory. Many reporting seniors forget this and often inadvertently render a report unsatisfactory. Conversely, an affirmative answer to paragraph

12 will not necessarily render the report unsatisfactory. Circular Letter 636 provides the necessary instruction in both instances but the fitness report form should show these words of caution. This would avert many mistakes.

(7) Neither the form, the instructions of Circular Letter 636, nor Letter of Instruction No. 1372, give any hint to the reporting senior that if he checks paragraph 14 (d), i.e., "Prefer not to have him," he thereby renders the report unsatisfactory. He is required to explain why if he checked it, and it is believed impossible to comply and still have a satisfactory report.

(8) Headquarters desires that all officers serving during their first six years of service receive a comment in paragraph 15 as to whether they are recommended for retention or not upon the expiration of this probationary period. However, no time period is shown on the form and this requires the reporting senior to remember this from Letter of Instruction No. 1372. The reporting senior has enough to think about in merely confining his thoughts to the officer being marked. The most unfair part of the entire fitness report is in this paragraph, for here the reporting senior can recommend that the officer not be retained and still not render the report unsatisfactory. While this does not appear on the form, it does exist in the instructions of Circular Letter 636. In all fairness to the officer being rated this should cause the report to be unsatisfactory and it should be referred to him for comment.

(9) The explanatory comment under paragraph 16 of the form now in use is so worded that reporting seniors are inclined to regard it lightly, yet it is here that the Selection Board can quickly and accurately judge an officer. More emphasis should be placed on this paragraph, but it will not be done properly until the form is changed.

(10) Letter of Instruction 1372 now authorizes reporting seniors to use split ratings in paragraph 17 where appropriate; i.e., "Very Good to Excellent," etc. This should be incorporated in the form.

(11) The reporting senior should be required to commit himself positively on the form as to whether or not he considers the report satisfactory or not before he signs it.

(12) It is felt that the fitness report form should be so arranged that when it is necessary to give an unsatisfactory report, it can be done with a minimum of correspondence. The burden

## 4th Division History

✿ *The Fourth Marine Division in World War II*, latest in Marine unit histories is now available and in the process of distribution. All former 4th Division members (or the next of kin of those deceased) will receive a copy of the history free; any queries should be addressed to Lt Charles Campbell, Headquarters, Marine Barracks, Quantico.

Non-division members may secure copies of the 238 page, well-illustrated history through the GAZETTE Bookshop for \$5.00.

should not be placed on the office force but rather upon the individual whose performance of duty has been unsatisfactory.

The foregoing are probably not all the flaws in the present fitness report form, but at least they are the outstanding ones. Before Circular Letter 636 was written, reporting seniors had twelve different references to consult if they were to accurately fill out a fitness report. This unduly taxed the retention of the reporting senior, and usually diverted his attention from the important subject—the person being rated—to the multiple regulations. This circular letter undoubtedly reduced the number of letters Marine Corps Headquarters was forced to write yearly to reporting seniors asking them to resubmit, correct, or refer to the officer, certain fitness reports they had previously submitted. However, during 1944 alone, Headquarters stated that more than 12,000 letters had to be written. This should have been indicative of the fact that the present fitness report we have is antiquated and has definitely outlived its usefulness. In order to get one page filled out correctly, five pages of instructions have been used. Should we continue to use this form just because we perhaps have thousands of them on hand? That isn't progress. The Army and Navy have long ago revised their fitness report forms. Why shouldn't we?

An attempt has been made by the writer to revise the present Marine Corps Officers' Fitness Report Form so as to incorporate all instructions included in Circular Letter 636 and Letter of Instruction 1372, where it was felt that those instructions were not unjust to the officer being rated. A radical departure was made from those instructions in only a few instances, as the instructions are believed to be generally sound.

These departures can be seen in the revised form under paragraphs 16, 17, 18, and 22. The reasons are obvious. In paragraph 16, it seems impossible, as previously stated in discussing the form now in use, to check that you "Prefer not to have him," and then explain why not, without making a critical statement. Consequently a note of caution has been added that this *will* make the report unsatisfactory. At the present time, if instructions are followed, a reporting senior cannot make the slightest criticism or the report becomes unsatisfactory. This is a mistake because it does not permit constructive criticism in paragraph 18, where it is sometimes needed. Frequently a reporting senior sees some little idiosyncrasy in the habits of an officer that should be noted on the form as constructive criticism but still feels that the officer deserves a satisfactory report. He therefore doesn't report it and the officer, when he sees his report on file in Headquarters, thinks everything is fine. The revised form will permit constructive criticism. Circular Letter 636 seems inconsistent to the writer when it permits the reporting senior to state that an officer is *not* recommended for a regular commission, and then in the same letter states that, "Generally a critical statement which the reporting senior would not like to have on his own record should be considered unsatisfactory." Perhaps this isn't criticism but it certainly isn't fair to the junior officer. How could you hurt him more? Failure to recommend him for a regular commission *should* render the report unsatisfactory. The merits of paragraph 22 on the revised form have been previously discussed as a remedy for the old form and will not be repeated.

If the reader will now place the present form alongside the revised one shown below, the changes can be fully appreciated:

## REPORT ON FITNESS OF OFFICERS OF THE UNITED STATES MARINE CORPS AND MARINE CORPS RESERVE

(To be submitted in accordance with Art. 137, U. S. Navy Regulations, and Art. 10-22, Marine Corps Manual)

U.S.M.C. \_\_\_\_\_

(Last) (First) (Middle) (File No.) (Rank) (Add "R" or "WR" (Use NA or NAVC  
(Name in full) as appropriate) if aviator)

Ship or Station \_\_\_\_\_

Period covered \_\_\_\_\_ months, from \_\_\_\_\_ to \_\_\_\_\_  
(Show time in transit if appropriate)

Occasion for report: (Check one) ( ) Detachment of officer reported on: ( ) Detachment of reporting senior.  
( ) Regular Semi-Annual: ( ) Quarterly: ( ) Special.

*To be Answered by Officer Reported on:*

1. Regular Duties: \_\_\_\_\_  
(Show dates if duties changed during period)

2. Additional Duties: \_\_\_\_\_  
(Show dates if other than dates shown in 1)

3. Wife's Address: \_\_\_\_\_  
(If unmarried so state)

4. Name, relationship, and address of person other than wife to notify in case of emergency: \_\_\_\_\_

5. My preference for next duty is: First Choice \_\_\_\_\_  
Second Choice \_\_\_\_\_

U.S.M.C. \_\_\_\_\_

(First) (Middle) (Last) (Rank) (Add "R" or "WR"  
(Sign full name) as appropriate)

6. Reporting Officer: \_\_\_\_\_ U.S.M.C. \_\_\_\_\_  
(First) (Middle) (Last) (Rank) (Add "R" or "WR"  
(Type full name) as appropriate)

7. Before making out this report, decide in your own mind on an actual officer in the grade of the officer now being reported on who, in your opinion, based on personal knowledge is the outstanding officer of his rank in the Marine Corps; or decide in your own mind the character attributes and professional qualifications which the ideal officer in the grade of the officer now being reported on should possess.

8. Method of rating.—Having reached a decision on step 7, consider carefully and keep in mind the following definitions, taking into consideration his length of service, the opportunities afforded him which might have a bearing on his performance of duty, his personal characteristics, and professional qualifications.

*Unsatisfactory.*—Inefficient; below minimum standard.

*Fair.*—Satisfactory; passably efficient; up to minimum standard.

*Good.*—Average qualifications; efficient, but to a less degree than "Very good."

*Very Good.*—Above average; efficient; well qualified.

*Excellent.*—Highly efficient; qualified to a high degree.

*Outstanding.*—Superior; exceptionally efficient; qualified to a preeminent degree.

*Not Observed.*—To be used in all cases where the reporting officer has had insufficient opportunity to observe the officer reported on during the period covered by this report to permit a rating as to performance of a particular duty, personal characteristics, or professional qualifications. Do not hesitate to mark "Not observed" on any quality when appropriate.



9. Considering the officer reported on in comparison with your ideal (7) and having in mind the instructions under (8), indicate your estimate of him by marking "X" in the appropriate space below. Remember—the value of this report depends on the degree of objectivity, impartiality, and sound, considered judgment displayed by the reporting officer. Be consistent throughout this report.

Performance of duty (based on fact):

|   | Not Observed | Unsatisfactory | Fair | Good | Very Good | Excellent | Outstanding |
|---|--------------|----------------|------|------|-----------|-----------|-------------|
| (a) Regular duties  |              |                |      |      |           |           |             |
| (b) Additional duties   |              |                |      |      |           |           |             |
| (c) Handling officers   |              |                |      |      |           |           |             |
| (d) Handling enlisted men   |              |                |      |      |           |           |             |
| (e) Training troops   |              |                |      |      |           |           |             |
| (f) Tactical handling of troops (unit appropriate to officer's grade) |              |                |      |      |           |           |             |

10. To what degree has he exhibited the following qualifications? Compare him with your ideal (7), and indicate your estimate by marking "X" in the appropriate space below.

|   | Not Observed | Unsatisfactory | Fair | Good | Very Good | Excellent | Outstanding |
|---|--------------|----------------|------|------|-----------|-----------|-------------|
| (a) Physical fitness (Stamina; vigor; endurance under hardship)   |              |                |      |      |           |           |             |
| (b) Command presence (military bearing; dignity of demeanor; poise; self control; simplicity and naturalness; neatness and orderliness in dress)  |              |                |      |      |           |           |             |
| (c) Attention to duty (Industry; the trait of working thoroughly and conscientiously until the job is done)   |              |                |      |      |           |           |             |
| (d) Cooperation (This faculty of working in harmony with others, military or civilians; tact; tolerance; diplomacy; understanding)  |              |                |      |      |           |           |             |
| (e) Initiative (The trait of taking necessary or appropriate action on own responsibility when specific instructions are lacking; aggressiveness; resourcefulness; self-confidence)               |              |                |      |      |           |           |             |
| (f) Intelligence (The ability to grasp readily situations and instructions and to quickly adapt to changing needs and conditions)   |              |                |      |      |           |           |             |
| (g) Judgment (Common sense; the ability to think clearly and arrive at logical conclusions)   |              |                |      |      |           |           |             |
| (h) Presence of mind (The ability to think and act promptly and effectively in an unexpected emergency or under great strain)   |              |                |      |      |           |           |             |
| (i) Force (The faculty of carrying out with energy and resolution that which is believed to be reasonable, right, or duty regardless of consequences)   |              |                |      |      |           |           |             |
| (j) Leadership (The capacity to direct, control and inspire subordinates to work to the maximum of their capacity and still maintain high morale; ability to effectively delegate responsibility) |              |                |      |      |           |           |             |
| (k) Dependability (Certainly of proper performance of duty; constancy; reliability)   |              |                |      |      |           |           |             |
| (l) Interest in his profession (Desire to excel through improvement of his military knowledge; enthusiasm; earnestness; zeal)   |              |                |      |      |           |           |             |
| (m) Ability to obtain results (Regardless of task assigned and in spite of obstacles)   |              |                |      |      |           |           |             |
| (n) Professional knowledge (Well versed in military subjects)   |              |                |      |      |           |           |             |
| (o) Justice (Giving every man his due; being impartial, honest)   |              |                |      |      |           |           |             |
| (p) Loyalty (The quality of rendering faithful and willing service and unswerving allegiance under any and all circumstances to superiors and to the Corps)                                       |              |                |      |      |           |           |             |

11. Has he any characteristics—temperamental, moral, physical, etc.—which adversely affect his efficiency?.....  
..... (yes or no). If yes, briefly describe them. ....

Note: Any adverse comment made here will render the report unsatisfactory.

12. During the period covered by this report, has the work of this officer been reported on either in a commendatory way, or adversely? ..... (yes or no). If yes, indicate subject matter and date .....
13. During the period covered by this report was he the subject of any disciplinary action that should be included on his record? ..... (yes or no). If yes, and if not previously reported to Headquarters, attach separate statement of nature and attendant circumstances. Note: An answer of "Yes" does not necessarily make this report unsatisfactory.
14. In case any unfavorable entries have been made by you in this or in a previous report, were the deficiencies noted brought to the attention of the officer concerned? ..... (yes or no). If yes, what improvement, if any, has been noted? ..... (Marked: none, very little, etc.) If no improvement was noted, what period of time has elapsed since the deficiencies were brought to his notice? .....
15. Do you, as reporting senior, recommend that this officer be assigned to the duty for which he has expressed a preference in paragraph 5, above? ..... (yes or no). If not, after reviewing all his duty assignments to date and carefully considering how to best develop his capabilities, so that the Marine Corps will benefit thereby, indicate what type duty you recommend he be assigned to with reasons to substantiate your answer.

16. Considering the possible requirements of the service in war, indicate your attitude towards having this officer under your command. Would you:

(a) Particularly desire to have him? ( ) (c) Be willing to have him? ( )  
(b) Be glad to have him? ( ) (d) Prefer not to have him? ( )

Check one. If (d), explain briefly. (This will render the report unsatisfactory)

17. (To be answered only when reporting on officers, regular or reserve, who are serving in their first six years of commissioned service.) Do you recommend retention in the service after expiration of revocable period of commission? ..... (yes or no). If negative give reasons—negative answer will render the report unsatisfactory .....

18. Remarks: (Utilize this space by giving a clear, concise appraisal of the officer reported on and his performance of duty, including anything worthy of special mention. Include a statement as to whether or not the officer reported upon is recommended for a permanent commission in the Marine Corps and whether he desires such appointment; also, include recommendations as to promotion. Any adverse statements on performance of duty, ability, character or conduct renders the report unsatisfactory unless they refer to minor imperfections and are of a constructive nature, for example: This officer was slow in getting started but is now

making good progress, etc.)

19. Indicate your estimate of this officer's "General Value to the Service." (Use one of the following ratings: Not Observed, Unsatisfactory, Fair, Fair to Good, Good, Good to Very Good, Very Good, Very Good to Excellent, Excellent to Outstanding, Outstanding.) If you desire to confine this officer's general value to the service to

a specialty only, add the words "in specialty" then name the specialty

20. I consider this report to be: ( ) Satisfactory; ( ) Unsatisfactory. (Check one).

21. Having in mind the special fitness of this officer and the efficiency of the naval service, I certify that to the best of my knowledge and belief all entries made hereon are true and without prejudice or partiality. I further certify that this report has been submitted to the officer being reported on and freely discussed with him.

(First) (Middle) (Last) (Rank) U.S.M.C.  
(Signature) (Add "R" or "WR" as appropriate)

Commanding

To be Answered by Officer Being Reported on ONLY when the Report is Marked Unsatisfactory:

22. Having seen the above report, and being fully cognizant of my rights as set forth in Article 137, U. S. Navy Regulations:

(a) ( ) I have made a statement which is attached to this report.

(b) ( ) I do not desire to make a statement.

(First) (Middle) (Last) (Rank) U.S.M.C.  
(Signature) (Add "R" or "WR" as appropriate)

(Date forwarded)

# The VT Fuze Vs. Amphibious Operations

THE UNIVERSAL CONCERN AND SPECULATION as to the role of atomic missiles and weapons in warfare of the future has pushed into obscurity a question of much more immediate and practical significance to every officer—how will widespread use of the VT fuze affect our present and future tactics, techniques, and equipment?

Atomic missiles at present are a strategic weapon of the highest echelon of command and not a daily working tool of the field forces. The VT fuze, however, is available for use by everyone who can deliver or request mortar or artillery fire, naval gunfire, and air bombardment, and defense against the VT fuze is now a command and individual necessity for every officer and man.

What is there about the VT fuze that will alter many of our methods and much of our equipment of the past war? The answer is simple. The VT fuze makes it possible and easy to achieve an air burst under practically any conditions, at the optimum height of burst, for all high explosive or chemical filled projectiles and bombs.

The desirability, even necessity, for effective air bursts of projectiles in modern warfare is the result of the never ending quest for better, surer, more efficient ways of killing infantrymen. Leading this quest in the missile throwing field for the past century has been the artillery, aided and abetted by the mortars since World War I, and joined by the close support aircraft in World War II. (There is certainly no more forlorn and oppressed figure in military history than the infantryman, who has trudged ever forward since the dawn of time, constantly assailed by the most ingenious and fiendish weapons that the best minds of his age could devise. It is a remarkable tribute to the hardiness of the breed that they have survived everything up to the chain reaction, and will probably survive even that.)

When artillery materiel and technical proficiency reached the point where the artillery produced the majority of infantry casualties and could often decide the outcome of battle, the infantry, as always, was forced to modify its tactics and adopt defensive measures.

A period of slow evolution of these defensive

means during the 19th century was climaxed in World War I by a hasty maturation, necessitated by the machine gun and massed artillery fire, into the deployed formations in depth and protective works for the infantryman that we know today.

The deployed formation reduced the potential number of infantry casualties from any one shell burst, and thus increased the amount of artillery (or ammunition) necessary to secure the results formerly obtained on massed infantry formations. The use of protective cover (fox hole, emplacement, trench, dugout, etc.) for both the individual infantryman and his crew-served weapons further reduced his likelihood of suffering casualties from artillery fire. He soon discovered that once he was below the surface of the ground he was comparatively safe from artillery shells bursting on impact.

It was the adoption of protective cover that was particularly frustrating to the artilleryman. He still found plenty of remunerative targets in an attacking enemy who came out in the open like a man, for after all they could deploy only so far without losing control, shock action, and continuity of the assault. But against a defending enemy, even if his defense was the frequently short one of a larger offense, the artillery lost much of its potency.

In a few hours' digging the infantrymen could have a position that the artillery could not defeat with the ammunition stocks normally on hand in the forward positions. By the time more ammunition was hauled up the defensive position could be further improved which required still

**By LtCol Frederick P. Henderson**



## New VT fuze has outmoded percussion and time fuzes, dictating the obsolescence of fox holes and congested beaches. Reliable and deadly, it bursts at optimum height, making necessary splinterproof troop protection and greater deployment of forces

more ammunition, setting up an endless chain of measure and counter measure. In World War I attempts were often made to defeat strong defensive positions by tremendous artillery preparations, lasting for days and firing astronomical amounts of ammunition. As often as not these preparations did not achieve the results desired, despite the tremendous effort and cost; furthermore, they were possible only in stabilized positional warfare where time and supply routes were ample for assembling the materiel required.

As a result of World War I experience it was concluded that in mobile warfare, or when unlimited ammunition was not available, the best that the artillery could normally do against a defensive position would be to destroy or damage the key parts of the position, harass the defenders as continually as possible, and endeavor to prevent them from firing their weapons under threat of casualties if they attempted to do so (i.e. neutralization) when our own infantry advanced to the assault.

If the artillery was to regain the dominance over the infantryman that it lost as soon as he learned to dig, it must find some way of getting shell fragments down *into* his fox holes and emplacements and not just have them whistle harmlessly overhead. The solution to this problem was readily apparent but difficult of attainment—shells bursting in the air over dug in positions would spray fragments into those positions. The difficulty was in getting a reliable fuze that would *always* burst the shell at the proper height above the ground, and would not introduce undesirable gunnery complications.

THE SEARCH for such a fuze was long and not particularly rewarding until the VT fuze was invented. Both the powder train and clock-work time fuzes with which we entered World War II cannot be said to have been greatly superior to those of the World War I. Despite certain mechanical improvements in the fuzes, the inherent defect of any *time* fuze remained—it must be present to detonate the shell at a certain fixed time after the gun has been fired. While it may be theoretically possible to compute the

exact time after the gun has fired that the shell should burst (at the optimum height) over the target, there are a host of practical reasons why this time cannot be determined in the field without adjustment on the target.

This adjustment must usually be made for each target, thereby losing the element of surprise on those targets on which observation is possible, and normally precluding time fire (air burst) on unobserved fires. The use of time fire on a target adds another element to be adjusted, the height of burst, in addition to range and deflection, thereby complicating the gunnery problem. Extensive training of observers is necessary before they are able to adjust time fire with facility. Adjustment of time fire at night, or under conditions of poor visibility, is extremely difficult, even for good observers at close ranges. Surprise time fire without adjustment may be obtained either in daylight or darkness, providing a time precision registration has



*A graduate of Purdue, as are many Marine artillerymen, LT COL FREDERICK P. HENDERSON entered the Corps in 1935, served with the 1st Marine Brigade, and went to school at*

*Fort Sill. He was at Pearl Harbor aboard the USS San Francisco as detachment commander when the war began, joined the 2d Marine Division as assistant G-3 in time for Guadalcanal. He served with I MAC staff as an artillery officer for the Bougainville operation, later with III AC at Guam, Peleliu, and Okinawa. Now head of MCS' field artillery school, COL HENDERSON is not new to the GAZETTE: he won the prize essay contest in 1939 and 1940; his last appearance was Hath Murdered Sleep in the November 1946 issue.*

been made on a base point or check point within transfer limits of the target, and if the vertical interval between the target and the registration point may be determined accurately. The effective massing of fires of two or three battalions using time fire is difficult; for the massing of many battalions it is almost impossible. Thus, in using time fire, we are denied the chance to obtain the desired effects of shock and high casualties resulting from employing artillery fire in mass. The difficulties encountered in fulfilling all of these conditions greatly restricted the use of time fire on the battlefield for adjusted, surprise, or unobserved fires.

The techniques for the delivery of time fire developed at Fort Sill were as good, if not better, than those of any foreign army. In combination with other gunnery techniques it is felt that our battlefield application of time fire was superior to that of other armies. Yet, due to the difficulties encountered in the delivery of time fire, we did not use it as widely as we wished, or as often as the situation called for it.

One final drawback to the use of time fire was the reliability of the fuzes themselves. No matter how skilled the personnel were in the deliv-

ery of time fire, or how precise the height of burst was adjusted, a discouragingly large percentage of the fuzes would function either above or below the optimum height of burst, with consequent reduced effectiveness.

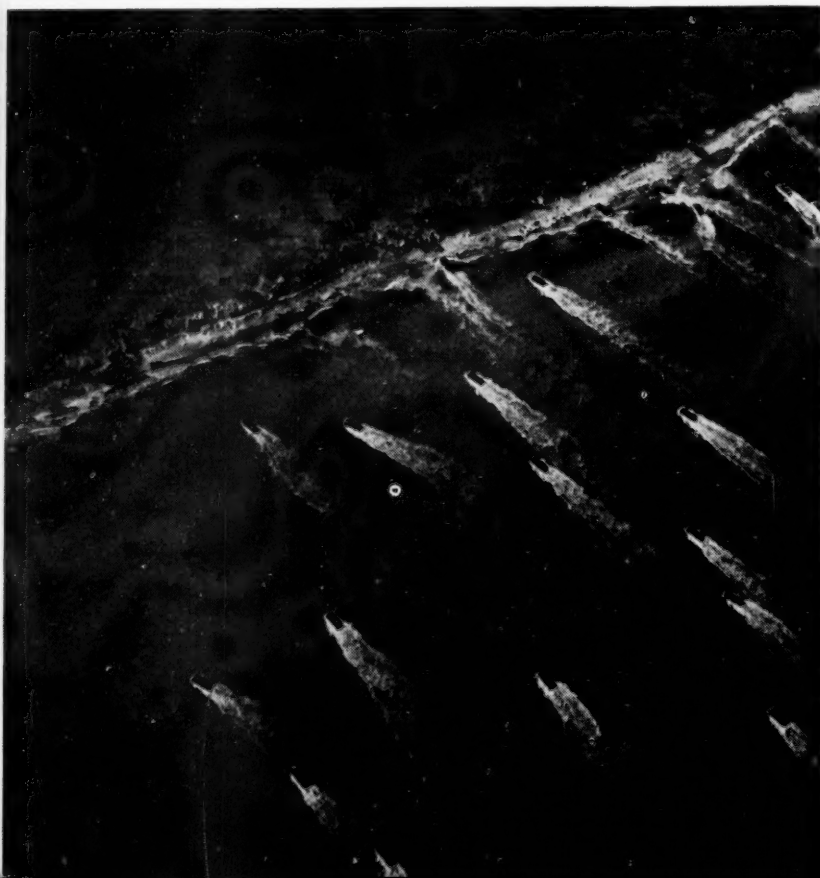
THE INVENTION of the VT fuze, however, has made the firing of air burst artillery fire as simple and easy as percussion fire, and with reliable results. It has further made air bursts practical for the first time for mortar fire and air bombing—also with reliable results. Because the VT fuze automatically functions at the optimum height of burst an observer is not required to determine this imaginary point in the air and adjust his height of burst to it. Fire direction centers need not conduct special registrations and maintain additional gunnery data in an endeavor to deliver surprise or unobserved airburst fires. The variations of elevation in the terrain throughout the target area do not complicate gunnery computations or reduce the effectiveness of air burst fire—the fuze itself corrects for elevation. In other words air burst fire may now be delivered accurately, effectively, and quickly under all conditions and without complicating

factors. Adjustment is not difficult if the target is accurately located, and unobserved fire may be delivered during darkness, poor visibility, or upon targets on which observation is not attainable. The massing of the fires of many battalions on a target may be accomplished as easily and rapidly as with percussion fire.

The invention of the VT fuze has thus introduced a new and lethal agent into our armory of weapons. It is one that restores to artillery, mortars, and aviation the ability to inflict casualties upon personnel in open emplacements and improves their present ability to inflict casualties upon personnel in the open.

It is logical to assume that other nations will soon have the VT fuze, and also

**Overhead bursts will necessitate splinterproof shields over personnel in landing craft prior even to the initial landing.**



that continued improvements in its reliability and capabilities may be expected. How then, will the widespread use of the VT fuze in warfare of the present and near future affect the present concepts of the conduct of amphibious operations?

Its effect will be felt before the landing force ever gets ashore. The assault troops, packed into landing craft and landing vehicles, present a far denser formation than after they are deployed ashore and offer a lucrative and unprotected target to the defender's artillery and mortars. By the proper timing and massing of his fires during the final approach of the landing craft (or vehicles) he may inflict heavy casualties and disorganization in the attacking force.

To prevent the losses from such fires from reaching proportions where they would jeopardize the success of the landing, there are several courses open to attacker. The most effective and important is an all out effort to destroy or neutralize all of the enemy's artillery and mortars. Experience has shown, however, that no matter how comprehensive and efficient our counterbattery (and countermortar) fires may be that we can never hope to silence all of the enemy's weapons. But in being aware of our new danger we may endeavor to achieve even better results than in the past. A second course is a more widespread use of smoke to blind the defender's observation or a more frequent use of night landings. A greater lateral dispersion of the landing force would tend to reduce the effectiveness of the defender's fires, if such dispersion is possible under the existing enemy situation and hydrographic conditions. A final countermeasure is the development of splinterproof overhead cover for landing craft and vehicles to protect the embarked troops.

☛ THE SUCCESS of an amphibious assault is largely dependent upon overwhelming initial shock to seize the beaches and give the necessary impetus to the sustained drive which must immediately follow to seize a beachhead large enough for the landing force to deploy, maneuver, and free the beaches of enemy observation and fire. To survive, a landing force must animatedly possess the claustrophobic fear that wild animals have of traps and cages. All of its elements must instinctively realize that the beach area is a trap, and must continually seek to drive inland away from it no matter what the cost. To

achieve the power necessary to seize the beach and create the momentum required for the advance inland, large forces of assault infantry must be landed rapidly, closely followed by their supporting arms and services.

The necessity to maintain the advance inland on the part of the infantry, and to immediately assume their supporting roles on the part of supporting arms and services, prevents them from devoting any considerable portion of their time or effort to protective field fortifications. As a result we find large numbers of troops occupying a limited area with no adequate overhead cover—the ideal target for a defender employing the VT fuze. Under no other conditions of land warfare does there exist so dense a concentration of troops and installations with so little cover and concealment as in the initial stages of a landing operation.

What can be done to prevent the amphibious assault from being stopped and contained on the beaches (and eventually dying there as at Gallipoli) by excessive losses and disorganization due to massed artillery and mortar fire employing the VT fuze? Again the first and foremost countermeasure is an effective counterbattery and countermortar plan that will destroy or neutralize the enemy's primary supporting weapons. Only when all, or the larger part of his artillery and mortars are silenced will the attacker gain respite from the destructive effects of VT fire. Night landings or the use of smoke may aid to some degree by denying the enemy observation of the landing force but will not prevent him delivering accurate unobserved fires into the restricted area he knows the attacker occupies. Additional means of increasing the velocity of the attack inland and the maximum permissible echelonment in depth, should be explored to decrease the time the attacking forces must be crowded into a small beachhead.

There is little that can be done right now to protect the individual infantryman from VT fire except to give him the skill and imbue him with the will to advance inland, and thus dilute the defender's fires by expanding the beachhead. (He can also cherish the hope that as he moves forward, the enemy observers will see targets in the crowded areas to his rear that are far more important than one disheveled infantryman). The development of ultra-light weight body armor for the infantryman (and all other personnel of the landing force) is an urgent require-



ment as a partial answer to individual protection from the VT fuze. Splinterproof troop carriers, preferably amphibious, appear to be a necessity in both the assault and exploitation phases. In the assault phase they might increase the speed of the assault and would certainly provide overhead cover for support elements, supply and evacuation personnel, communications personnel, and for front line personnel at certain times.

For the infantry's organic supporting weapons, the mortar and machine gun, some overhead protection is indicated. These two weapons have long held a top position on the target list of the opposing artillery and mortars. Sonic and radar locating devices under development in the closing days of World War II will make the lot of mortars and machine guns even more unenviable in the future. Light weight, splinterproof, self-supporting shields, large enough to cover the standard open emplacement for mortars or machine guns may offer an interim solution for the protection of these weapons.

☛ THE ARTILLERY of the landing force is in definite danger of early destruction unless means are found to protect it from enemy counterbattery, for the VT fuze has advanced the effectiveness of counterbattery fire more than any other development in modern artillery. The familiar artillery emplacement is now only an illusion of protection. The security the artilleryman once felt when his piece, cannoneers, and ammunition were dug in has vanished in an air burst over his gun pits—an air burst that damages vital parts of his gun and kills or injures his cannoneers. The ultimate answer to the VT fuze will probably be the self-propelled artillery mount, with complete splinterproof protection for the gun and crew. Interim protection seems to lie in the overhead shield, large enough to cover the gun and crew, and capable of being carried in the prime mover.

Probably no element of the amphibious force is more vulnerable to the VT fuze than the shore party. Day and night the shore party must work in the open, the heart of the amphibious attack, yet confined to a very restricted area that has undoubtedly been ranged upon by all enemy weapons. The development of improved equipment and techniques to speed the transfer of cargo over the beaches will do much to minimize the damage from enemy VT fires. When we can move all of the supplies needed by the assaulting

elements in the first stages of the attack directly from the ships to the using units, or to small dispersed dumps, by means of amphibious vehicles, the initial shore party may be reduced to control and pioneer elements and its vulnerability greatly decreased. All shore party headquarters should be provided with a splinterproof amphibious trailer CP (as should all other headquarters from the infantry battalion up). All engineer and cargo unloading equipment should be provided with splinterproof cabs and protection for vital parts.

The problem confronting other elements of the landing force follows the pattern outlined above—how can personnel and equipment be protected from the air burst of projectiles and bombs?

Before discussing the conditions the landing force may encounter in the exploitation phase, let us consider what effect the VT fuze will have on the defense when it is employed by attacker's supporting weapons (organic, naval, air). If we assume that the assault is to be made upon a fortified position similar to those encountered in the Central Pacific, the effect of the VT fuze on the defender will be practically nil. Fully appraised by now of the crushing naval and air support our amphibious doctrine provides, aware of the portent of the VT fuze, and fearful of atomic explosions, any future enemy will bend every effort to place the greatest possible thickness of concrete, steel, or rock between all of his defending troops and our bombs or projectiles. Against such passive defenses the VT fuze is useless. Such fortifications make the VT fuze even more useful to the defender, for no matter where our troops penetrate into his position, or how they swarm over and around his defensive works, he may fire VT fuze at them without fear of harming his own troops. If the defender has not had the time to fortify the selected landing area, or if he chooses to wage an active defense, our employment of the VT fuze will affect him along the lines now to be discussed.

☛ HOW WILL THE VT FUZE *affect* the exploitation stage of an amphibious operation? When the attacker's forces are all ashore and fully deployed, and the defender has been driven from the fortified positions he held during the assault, the amphibious expert considers (condescendingly) that conditions of "normal land warfare" are in the ascendency. When we get one side out of prepared positions with overhead





**Beach unloading of personnel and equipment would be made doubly difficult by the overhead bursts of the VT fuze. This congested beachhead was typical of Iwo Jima.**

cover, the VT fuze tips the scales in favor of the attacker, for a defense without overhead cover is no defense at all.

The "hasty" defense positions which infantry feverishly digs when thrown on the defensive do not provide protection from VT fire. Rather do its individual fox holes and weapons emplacements become self-dug graves under the ripping crash of VT bursts overhead. It matters not whether the diggers are part of a larger force assuming the defensive, or belong to the aggressor and are digging in for the night, or are forced to accept the defensive locally—an *open hole doesn't protect against the VT fuze!* (The theorist can design a fox hole that will give protection—providing you don't have to fire a rifle from it, or live in it, and have all day unmolested to dig it.)

The solution to this problem of how to go from the offensive or defensive above ground, to the defensive under overhead cover—and quickly—will not be easy and will require much original thought on the part of all officers and men. Only

a few of many possible solutions, in addition to those already discussed, will be presented here.

Greater dispersion is one apparent solution, but, as the probable indicated dispersion will be about double that of our present defensive formations, it does not appear acceptable.

The use of splinterproof troop carriers offers another solution. Until a defensive position with overhead cover could be constructed (probably under cover of darkness except for portions having defilade or concealment) it would be manned only by a skeleton force, with the remainder of the personnel in nearby rendezvous in troop carriers, ready to move forward if the enemy attacked in force. This movement must, however, be properly timed and executed to place the defending troops in position just after the attacker has been forced to cease firing VT fuze due to safety considerations for his own troops.

An increased use of engineer personnel (ergo—more engineers) using excavating equipment and prefabricated overhead cover to construct defensive positions for reserve units and/or into

which engaged units may withdraw (if a withdrawal is permissible) is very probable. An increased tendency toward defensive positions in heavy woods, villages or towns, as ready-made protection of varying degrees of effectiveness will probably be instinctive until the ultimate defense against the VT fuze is found.

✿ IT MIGHT BE PERTINENT here to point out an interesting chain of measure and countermeasure initiated by the use of the VT fuze. The VT fuze tends to negate itself by forcing an enemy to dig in and provide himself overhead cover. As soon as he has accomplished this, he has greatly limited the usefulness of both the VT fuze and the super-quick percussion fuze. This will reduce the effectiveness of area (neutralization) fire and require more precision adjustments to obtain direct hits on enemy positions — entailing in turn a longer time for artillery and mortars to defeat or neutralize an enemy position. If the enemy goes about the business of providing overhead cover enthusiastically, he may soon be protected against our direct support (light) artillery firing fuze delay, and we are therefore required to have more medium and heavy artillery to blast him out of the position the VT fuze forced him to construct. Such a position further gives him the advantage of using the VT fuze over his own fortifications against the attacker's unprotected troops.

Sorrowful as the plight of the defender's infantry may be the attacker's foot soldiers have their worries too. Chief among them is this—how are they going to get across any considerable space of open ground to give the defender the good old cold steel without being badly cut up or stopped by VT fire? The ingrained technique of "advancing by fire and movement, taking advantage of cover and concealment" runs into a stumbling block if someone asks, "Cover under what?" Enough attacking infantrymen in the past could find cover from rifle, machine gun, percussion mortar, and artillery fire in craters and small irregularities of the ground

to enable a well supported attack to succeed. But again we find that such tried and true infantryman's friends have deserted him—they don't protect against the VT fuze.

The splinterproof troop carrier again seems to offer a remedy. An attack resembling a ship-to-shore movement in which the attacker embarks in his troop carriers in rendezvous areas, deploys and moves to (or into) the hostile position, debarks, and seizes the position may be common in the future. This method allows us to maintain VT fire on the enemy's position until the troop carriers are in it and ready to debark their loads. An increased reliance upon smoke or darkness to screen the attack is probable in the future.



A solace for the troops up front is the comforting thought that life is going to be more difficult too for those rear area inhabitants they conceive as living in the lap of luxury (Spam *twice* a day!). The fine tented establishments of higher headquarters and service units, brazenly topside, and with ineptly dug fox holes for only 50 per cent of the personnel, are doomed. Whenever a gun (land or naval) can fire a shell, or a plane can carry a bomb, there will

appear the ubiquitous VT fuze. The order of the day will now be splinterproof trailers, dugouts, or stout buildings, with the theorists' fox hole for everyone who can't squeeze in one of the above when the scrap iron starts flying.

For every new weapon or tactic of war there has always evolved a suitable defense. Being fully aware of the probable effect of the VT fuze upon amphibious operations it is up to us to diligently seek to defend ourselves against it and to bend it to our own use. There is no time or cause for pessimism as to what might have happened if it had been used against us in the past war—it wasn't. However difficult it may make our problem now, an energetic and intelligent approach to the problem is sure to confirm the old adage—"If Winter comes can Spring be far behind?"

US ✶ MC

## Marines in the Pacific War

Continued from page 42

voy in there on 1 February. But Maj Christensen's bold 2,000 mile flight was the first time an American plane had appeared over the place, and the Japanese naval command, in a considerable state of nerves over the idea that this might mean increased submarine attacks and possibly a land-based air assault, ordered Kondo out westward to base on Palau and the Tawi Tawi passage in the Philippines. It does not seem to have occurred to ViceAdm Hitoshi Koyabashi, in command of Truk, that the removal of these major fleet units increased instead of decreased the danger of an American attack. When, on the morning of 15 February, his recon planes reported no signs of American approach, Koyabashi grounded his snoopers, (he was very short on fuel) had his attack planes defueled and relieved of their weight of bombs and torpedoes, and sent the pilots to barracks on islands separate from the airfields. The only other news he might have received was from the submarine *I-43*, out scouting to the north; but as she surfaced, possibly to make a report, she was torpedoed by USS *Aspro*. The result was that at 0714 on the morning of 17 February, dotted with fleecy white clouds, he got the word that hundreds of American planes were approaching the great base.\*

THE FIGHTER COMMANDS were alerted at once and a good many of them got into the air, though not all; on one island the alarm did not sound till the attackers were overhead. Mitscher had sent his own fighters in for the first sweep. There was a violent dogfight in the skies as the two groups of planes bumped into each other, the Japs diving down through our formations at full power to hide in the clouds below if they missed. "They fought as though they were in a daze," said one of the American pilots and this was substantially true, for the enemy had had no time to form in those tight squadrons under a leader, on which they so much depended. Japanese planes dropped all over the place—127 of them according to the estimates of our intelligence, though subsequent information from the Jap records made it much smaller—only about

35. American dive-bombers following in jumped on the airfields and shipping in the lagoon. Pickings were rich, since Koyabashi had not been able to bring the pilots and planes of his strike groups together and there was a big group for Rabaul waiting ferry pilots at the fields; nor had most of the ships time to work up steam. No less than 235 planes were destroyed on the ground or water, 21 of them multi-engine jobs (our estimate was much less here. We did not know that the Rabaul group caught fire from one another and all burned.) Some 13 transports and supply ships were seen to sink and admitted; 17 more actually went down, including a 20,000-tonner. So did the destroyers *Fumitsuki* and *Tachikaze* and the cruiser *Naka*. The destroyer *Oite* was so badly hit she could not move. The cruiser *Katori* and destroyer *Maikaze* did make it out of the lagoon and were escaping to the north in a somewhat battered condition when they ran into *Iowa* and *New Jersey*, the two most powerful battleships in the world, and were sunk in a couple of minutes.

SPRUANCE LED HIS FORCES right around the atoll to attack again from another direction next morning. Now was the chance for the Japanese system of defense by quick assembly of aircraft from adjacent areas to justify itself and Adm Koyabashi summoned units in from all over the Carolines. They began to arrive on the night of the 17th and all night long drove at the carrier force in energetic but badly coordinated attacks. One of them got a torpedo hit on *Intrepid* which left her temporarily without steering but unhurt in speed or ability to handle planes; but the Japs paid for that with the loss of over half their squadrons. Next morning, Mitscher's planes hit Truk again, finished off *Oite* and some of the cargo ships that had only been damaged the day before, wrecked everything above ground, and then soared back to the fleet. They had accounted for a grand total of 296 Jap planes beside all the shipping; and they were not through yet, for Spruance sent *Intrepid* back to Pearl with *Cabot* and a battleship for company, and went rushing north through the Central Pacific to Saipan, the enemy's big base in the Marianas. He was approaching it on the 22d when spotted by a scout plane. The carriers put up their combat patrols and fought through the night against the usual torpedo attacks, next morning going in. They shot down 29 planes and got some 80 odd on the ground, but not many ships there, since most of them had time to get away.

\*They came from Reeves' carrier group of *Enterprise*, *Yorktown*, and *Belleau Wood*; Montgomery's of *Essex*, *Intrepid*, and *Cabot*, and Sherman's of *Bunker Hill*, *Cowpens*, and *Monterey*. The supporting vessels were battleships *North Carolina*, *South Dakota*, *Massachusetts*, *Alabama*, *Iowa*, *New Jersey*; heavy cruisers *New Orleans*, *Minneapolis*, *San Francisco*, *Wichita*, *Baltimore*; light cruisers *Santa Fe*, *Mobile*, *Biloxi*, *Oakland*, *San Diego*, and numerous destroyers.



## VII

✿ NOTE SPRUANCE'S STRATEGY, which operated both in the psychological domain effectively to exorcise the ancient demoniac ghost of Truk, and also on the chessboard of the ocean, to impose a moving screen of force between Eniwetok, which was attacked on 17 February, and any attempt to interrupt the operation by sea or air.

Aside from Engebi on the north, where the airfield was, the main islands of the group are two, Eniwetok itself and Parry, on the southern edge of the circle, each flanked by a passage deep and wide enough to admit heavy ships. Reconnaissance had failed to show any important forces on the latter two islands.

These features determined the hastily drawn plan of attack. The fleet would steam right into the lagoon and a seaplane base would be set up there, the planes working from tenders. Engebi would be attacked first, by Col Walker's 22d Marines with artillery on the flanking islands as at Roi-Namur, two battalions going in abreast, the third in reserve. The 106th Infantry was short one battalion, which had gone to Majuro. One of the remaining battalions ought to be enough for Eniwetok Island, with the second in reserve, and when that was cleaned up, the 106th would move to Parry. Fire support was to be from *Colorado*, *Tennessee*, and *Pennsylvania*, with heavy cruisers *Louisville*, *Portland*, *Indianapolis*, and seven destroyers; air support from Ginder's group of carriers and Adm Ragsdale's escort carriers, *Sangamon*, *Suwanee*, and *Chenango*.

✿ THE FIRST PART of this scheme went exactly as written. The ships steamed into the lagoon and tore Engebi all up with their discharges while a Jap lieutenant ashore wrote in his diary that "What must come, has come. I am amazed at the severity of the bombardment; my stomach is upset," and distributed *sake* to his platoon. All day the guns pounded; as dark fell, *Schley* put out her rubber-boated demolition teams who worked in and buoyed channels for the landing craft. At dawn the men of the 22d were boated and at 0842 were on the southwest beach of Engebi a little ahead of schedule. (The control arrangements had vastly improved and in addition the assault teams had the support of a number of LCI gunboats, used for the first time against Kwajalein Island, where they had proved vastly effective.)

Machine gun and rifle fire along the beach was sporadic and generally inaccurate. The two battalions worked in rapidly for about 100 yards, set up effective liaison—and discovered something entirely new in the line of Japanese defenses. The marines called it a "spider web"; it was made up of a number of empty gasoline drums laid end to end to form a pipe and well dug in. A number of such tunnels would radiate from a central spider pit or pillbox. As soon as the latter came under fire the men in it were off through their pipes to turn up 50, 75, 100 yards away, full of fight and still under concealment, diving down again as soon as they had fired once. The whole operation turned into a feverish pursuit of moles by cats with our forces rapidly dominating the surface of the island, yet being sniped at from all directions. At 0955 the 3d Battalion of the regiment was put ashore. It had to go for every pillbox and hole on the way to the front, if front it could be called, just as though it were the first group on the island.

✿ ONE OF OUR MEN wrote later: "That night was unbelievably terrible. There were many of them left and they all had one fanatical notion, and that was to take one of us with them. We dug in with orders to kill anything that moved. I kept watch in a fox hole with my sergeant and we both stayed awake all night with a knife in one hand and a grenade in the other. They crept in among us, and every bush and rock took on sinister proportions. They got some of us, but in the morning they lay all about some with their riddled bodies actually inside our fox holes. Never have I been so glad to see the sun."

That sun looked down on the last resistance of Engebi; but a hitch in the original plans was caused by the discovery in the riddled headquarters post of the island of documents indicating that the jungle and thick brush of Eniwetok and Parry islands held a good many more men than had been thought in the beginning, including MajGen Nishida of the 1st Amphibian Brigade. There was a quick conference and Gen Thomas E. Watson, in charge of the land forces of the operation, stepped up his force for Eniwetok Island to put in both battalions of the 106th Infantry with the 3d Battalion, 22d Marines, in reserve. The 27th Division men landed midway along the island at 0915 of that day, 19 February, meeting little resistance at the water, but considerable fire as they worked inland, and it was difficult to get the troops moving. They lacked



both the training and the drive of the marines and were encountering a series of well-prepared positions from which the Nips retreated in good order, one after another. At 1330 the Marine battalion was put in, penetration across the island was achieved, and the troops began to sweep it out northward and southward. It was still not cleared by night and the Japs infiltrated vigorously into the loose, indeterminate lines, producing another night fight like that on Engebi. Next day both grenades and satchel charges ran short; more had to be flown in from Kwajalein, but resistance was finally put down by the morning of the 21st.

That left Parry. It had been intended to use the 106th there, but the General was not too confident of the performance of those infantrymen and switched his plans to make it the 22d Marines, with the reconnaissance and scout companies and part of the 10th Defense Battalion as a reserve afloat. The landing was on the morning of 22 February, while Spruance was hitting Saipan. It was a savage fight. The place had some natural caves which had been developed into a spider-web system; many Japs had survived the naval bombardment delivered by *Tennessee* and *Pennsylvania* from no more than 1500 yards, and some of them managed to put an enfilading fire along one of the beaches that forced its evacuation half an hour after landing. But by evening most of the island was overrun; and the rest of it next day, after the ships had kept the place bright all night with star shells, to make things difficult for the Japs who popped out of their holes in the usual night attacks.

So Eniwetok was ours at a cost of 299 killed, 766 wounded, mainly on Eniwetok Island and Parry. Of the Japs 3,400 fell and we got 66 prisoners.

### VIII

☛ THAT WAS THE CONQUEST of the Marshalls, the first true amphibious operation—not in a sense fighting across beachheads to a self-sustaining operation ashore, for that had been done at Guadalcanal and several times in MacArthur's campaign along the coast of New Guinea, already a serial story by the time Kwajalein began. The Marshalls operation was amphibious in both a wider and a deeper sense; the sense of combining strategy at sea and ashore. It involved the conception that although the opposing parties in a war may control fortresses, base areas, whose geographical interlocking it is almost impossible

to resolve, victory will rest on the banners of that party which holds the open areas among the fortified positions. This is to say that the side with the best communications will win; or to put it another way, that amphibious operations and sea power are inextricably linked. As soon as a new base becomes self-sustaining the fleet is free to attack other points, transport its own special type of troops (marines) to a spot where they can conquer a new, a more forwardly base. The effective conquest of the Marshalls by the capture of only two atolls was the perfect answer to earlier complaints about island-hopping strategy; it swallowed a quarter of the Pacific at a gulp.

☛ AIR ENTERS the picture, of course. One of the best reasons for the conquest of bases in the island network was to provide airstrips on land from which planes could take off at any hour of day or night to oppose enemy interjections. Adm Yamamoto had seen this very clearly. His trouble was—or the trouble of the lesser men who attempted to carry out his doctrine—that they saw the mission of land-based air too clearly. They thought it the most important and almost the only factor. They never imagined that the strategic mobility of a fleet could be so great or that of an airforce so restricted. The dreadful surprise at Truk, where an entire air flotilla had been concentrated in spite of the need of planes elsewhere, and the complete failure of the counter-attack there, shows how far they erred.

No Japanese seems to have realized what the American Marine leaders realized from the beginning—that in amphibious operations, island warfare, time is more essential even than lives. Parenthetically, the time factor is the most difficult of all in war to grasp and when you have a commander who really understands what a clock is good for, his name is Napoleon.

If the time factor had been right, if the Marines had not upset the Japanese time schedule, there was nothing really wrong with their system of defense. Adm Kondo, for instance, could have attacked the 5th Fleet by surface, subsurface, and air in the Gilberts while that fleet was still burdened with its transports and tied to a narrow area, unable to engage in an all-out action. The Japanese devoted all their planning and skill to methods of gaining time from Guadalcanal down, in fact, yet they never succeeded in gaining enough to make an effective counter-attack.

Why? Not an underestimation of American industrial power, for Yamamoto, if no other, had accurately estimated that from the beginning. It could hardly be a failure to use the best tactical methods either, for they continually came up with something new in this field, even though the results tended to resemble those of the fox competing with the cat in Aesop's fable. Rather it was the Japanese failure to grasp the large picture; to understand that operations at the shore and among the islands and those on the sea form parts of a single complex. No Japanese ever got hold of the idea that it did not in the least matter how many islands they held as long as the American fleet held the seas—certainly not till after the Marshalls had fallen.

At all events the American fleet now clearly did hold the high seas, Truk was almost as useless as Wotje (unless they could induce us to assault it) and the Japanese defense line was forced back to the Marianas, Yap, and Palau, the inner bastions. The realization of this, the obvious fact that in a manner no Japanese could understand, the Japanese military system had failed, shook to its foundations that dictatorial government which had ruled the country for more than a generation.

Adm Takagi had just completed his task of gathering data. He pointed out that essential raw materials were not coming forward from the Southern Resources Area and in view of the growing shortage of merchant ships—the Americans appeared to have discovered some new and deadly type of torpedo—it seemed unlikely that they ever would. It had already been necessary to cancel most of the building program on heavy ships to provide new escort vessels for convoys. This was reflecting back into the general naval situation, for the Americans were at sea with powerful new battleships and carriers that weighted the balance heavily in their favor. Moreover, advices from the Army in China and the publicity of the Americans themselves indicated that bases were being set up there for long range air attacks on metropolitan Japan. The Admiral considered it was time to seek a compromise peace, even at the cost of withdrawing from China and Korea.

Naturally this report was not made in writing; things are not done that way in Japan. Instead, Takagi called on old Adm Yonai, a former premier and one of the most respected members of the Jushin. After the ceremony of the teacups the junior officer set forth his case. Yonai con-

fessed that other members of his informal but powerful organization had been agitated by fears that all was not well in the war; and when his visitor had left, himself called on several of the other Jushin. One of them was another retired admiral, Keisuka Okada; he had just received information to the same general purport from his son-in-law, Hisatsune Sakonizu, who was a member of the Cabinet Planning Board. The two old men quietly sent word to Tojo that it would be best if he withdrew, and as they had of course consulted others of the Jushin before doing so, Tojo could get no other advice anywhere.

But Hideki Tojo was by no means willing to give up his position as the most powerful subject of the Emperor since the days of the Ashikaga Ministers of the Left, back in the 13th Century. He retorted by a counteroffensive, directed both in the military and political fields against the Navy men whom he rightly placed at the core of the intrigue to remove him. He asked the resignation of Adm Osami Nagano, who had stepped into Yamamoto's place after the latter's death. The attack on Truk was the ostensible cause, but in order that face should not be lost, nor the appearance of solidarity against the Empire's opponents, Field Marshal Gen Sugiyama, Nagano's opposite number in the Army office, was also eliminated, both men being elevated to the Jushin. Tojo himself took over the Army staff; the Navy went to Adm Shigetaro Shimada, one of the few men in his service who had all along been a supporter of the "Manchuria Gang."

On the strictly military side, an offensive into southeastern China was ordered for the seizure of the potential American air bases, a program which presented no great difficulties. Adm Shimada demanded and received assurances that the pilots now in training would not be at once sent to the front in New Guinea, but be reserved for the new carriers in order to bring the fleet up to something like equality with the Americans. Additional steel was allocated to speed up the construction of six more carriers—the six that had been begun as battle cruisers. The Army heads remained adamant about the use of submarines to supply the isolated forward bases, but Tojo conceded that this was not a proper naval function and set up a new Army bureau to build submarines that would be under Army command. Adm Shimada was glad to detail naval officers to give the necessary technical help.

To be continued

## Message Center

### Leadership and Privilege . . .

DEAR SIR:

A few days ago, I took part in a discussion which not only infuriated me but amazed me. I heard an officer make the statement that it was part of an officer's privilege to be dealt with leniently for such offenses as overleave, bringing women into barracks, drunkenness, and other offenses. Unfortunately this erroneous viewpoint is held by some otherwise capable officers. This idea is not only detrimental for a good officer-enlisted man relationship but it tends to undermine our entire military structure. The Marine Corps has always led the way among other services in a good solid understanding between its officers and men built up by participation of officers and men in the hardships, discipline, and spirit of the Corps.

An officer has certain privileges accorded to him by naval law and custom, but he definitely does not have the privilege of breaking any regulation, law or custom which governs officer and man alike.

There is nothing more infuriating and devastating to an enlisted man's sense of fair play than to be punished by a brig sentence or a reduction in rank and then see an officer commit the same offense and go scot free. Yet you and I have both seen this happen at one time or another. This sort of thing is not

the fault of our military system, it is the fault of the individual commanding officer who allows this to happen in violation of all military tradition and law.

It is my opinion that there is nothing radically wrong with our present military customs and laws. The fault lies with the individuals who are under oath to preserve and practice them and fail to do so. No matter what customs or laws are promulgated, they will have no effect unless enforced by each individual from the top of the ladder on down. In most cases where the enlisted man has legitimate complaint against officer privileges, if investigated, it would be found that that officer was violating the law or a military custom.

The greatest gripe that the enlisted man has is against the erroneously set up double standard which some officers establish in their commands. The average enlisted man doesn't begrudge the officer privileges given him by custom and the good book. He does resent, however, seeing an officer make an exception of himself when it comes to obeying naval regulations and restrictions. He also resents, and rightfully so, the officer who takes advantage of his office to further his own selfish interests at the expense of his troops. An officer's primary duty is to look out for the welfare and interest of his men and to show favoritism to no one, including himself.

It is a certainty that if our officers were all thoroughly indoctrinated in proper leadership principles and were not guilty of the practice of "do as I say and not as I do," there would be no legitimate criticism of our military structure as it stands today.

I offer two corrective measures for improving our officer-enlisted man relationship. The first is to stress good sound leadership practices in the academies, basic schools, and other service institutions. The second measure is to enforce the customs and regulations of the service on the officers more stringently than on the enlisted men. If an officer cannot set a good example for his men, get rid of him and get one that will.

Don't just point out the way, Mister, and expect your men to go. Lead the way, Mister, and you know they will go.

WILLIAM C. STOLL, JR.,  
Captain, USMC

*The GAZETTE wants it readers to use these pages not only for comments and corrections on past articles, but also as a discussion center for pet theories, battle lessons, training expedients, and what have you. This is not a "gripe" column; what is wanted are contributions designed to promote discussion on topics of professional importance to Marine Corps policy and thought. Correspondents should include their name, rank, and address, but the signature will be withheld if requested.*

## Interesting Reading For Marines



The U. S. Marines in the Pacific  
1942 — 1945

# Semper Fidelis

*Written by Marine Combat Correspondents*

The Marine combat correspondent was the man who told the people back home what their men were doing on the Pacific battle fronts. Stories of valor; of human interest that did not reach the headlines—these fill the pages of *Semper Fidelis*.

**\$3.50**

*Illustrated*

|                                     |                           |        |
|-------------------------------------|---------------------------|--------|
| On to Westward                      | Robert Sherrod            | \$3.00 |
| The Long and the Short and the Tall | Sgt Alvin M. Josephy, Jr. | \$3.00 |
| A History of the U. S. Marine Corps | Col Clyde H. Metcalf      | \$5.00 |
| Out in the Boondocks                | Horan and Frank           | \$2.75 |
| U. S. Marines on Iwo Jima           | Official Records          | \$3.50 |
| The Marine Corps Reader             | Col Clyde H. Metcalf      | \$3.00 |

SEND AIR MAIL—

**ORDER FORM**

GET QUICKER SERVICE

## Gazette Bookshop

MARINE CORPS SCHOOLS, BOX 106, QUANTICO, VA.

Order by title only, enclosing remittance.

Enclosed is \$ ..... for the following order of books:

No C.O.D.'s

| Title | Price |
|-------|-------|
| 1.    |       |
| 2.    |       |
| 3.    |       |
| 4.    |       |

NAME

(Print)

ADDRESS

(Print)

Make Checks or Money Orders Payable to Marine Corps Gazette Bookshop.  
Members of the Association entitled to 10 Per Cent Discount on Books.

G—5—47





# Gazette Bookshop

## Your Marine Corps in World War II

More than 250 pictures of the Marines in action. Bound in handsome red imitation morocco—a must for marines.

**\$4.00**

There are still a few copies left  
Have you put in your order?

## the 1946 Bound Volume of the Marine Corps Gazette

**\$5.00**  
(no discounts)

**BETIO BEACHHEAD** *by four Marine combat correspondents* . . . the proud history of the 2d Marine Division's struggle for Tarawa told well by men who were there, illustrated with 72 photographs.

**. . . AND A FEW MARINES** *by Col John W. Thomason, Jr.* . . . legendary stories of the "Old Corps" written in virile, gallant style by the finest Marine writer that ever lived. Illustrated with his own dynamic sketches.

**CORAL COMES HIGH** *by Capt George P. Hunt* . . . a company commander relates the grim experiences of Co K, 1st Marines, and its fight to hold the flank of Peleliu beachhead. Illustrated with sketches by the author.

### U. S. Marine Combat Photos 20 Photographs — 4 x 5 inches

**75 cents per set—Formerly \$1.20**

- |               |             |
|---------------|-------------|
| 1—Tinian      | 5—Saipan #1 |
| 2—Eniwetok    | 6—Saipan #2 |
| 3—Kwajalein   | 7—Tarawa #1 |
| 4—New Georgia | 8—Tarawa #2 |

### U. S. Marine Corps Photos 20 Photographs — 4 x 5 inches

**\$1.50 per set—Formerly \$1.98**

- |                     |           |
|---------------------|-----------|
| 1—Cape Gloucester   | 4—Saipan  |
| 2—Iwo Jima          | 5—Tinian  |
| 3—Southwest Pacific | 6—Peleliu |

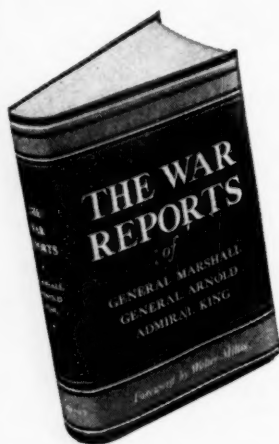
**NO DISCOUNTS ON PHOTOS**

### Uncommon Valor

*by six Marine Combat Correspondents*

The history of the six Marine Corps divisions written by men who served with the units about which they write. A first hand report of what each did towards winning the Pacific war.

**\$3.00**



## The War Reports

of

General George C. Marshall, General Henry H. Arnold,  
and Admiral Ernest J. King



Here are the reports of the three top leaders of America's fighting forces. In all, there are nine reports, three by each officer, covering all phases of the war-time period from July 1939 through final victories in all theaters.



*Illustrated*

**\$7.00**

**HISTORY OF WORLD WAR II** *Dr. Francis Trevelyan Miller . . . a great, 965 page compilation of history and photographs made possible by the work of 200 editors in 30 countries, complete with official records and maps.*

**LAST CHAPTER** *by Ernie Pyle . . . the final work of the GIs' greatest and best loved correspondent. It is Pyle's story of what he saw in the Pacific theatre from the time he sailed until his luck ran out.*

**WORLD WAR II** *by Roger W. Shugg, A.M., Ph.D., and Maj H. A. DeWeerd, Ph.D. . . . This book presents facts and figures, not opinions, and tells the whole story briefly. Written from the viewpoint of our Allies as well as our own.*

**Lee's Lieutenants (3 vols.)**

**Douglas S. Freeman \$15.00**

**R. E. Lee (4 vols.)**

**Douglas S. Freeman \$20.00**

**Battle Report (Pearl Harbor  
to the Coral Seas)**

**Comdr Walter Karig \$3.50  
and Lt Welbourn Kelley**

**A Basic Manual of Military Small Arms**

**W. H. B. Smith \$5.00**

**Rifles and Machine Guns**

**M. M. Johnson, Jr. \$5.00**

**Decisive Battles of the World**

**Sir Edward S. Creasy \$3.00  
Robert H. Murray**

**The Story of Weapons and Tactics**

**Tom Wintringham \$2.25**

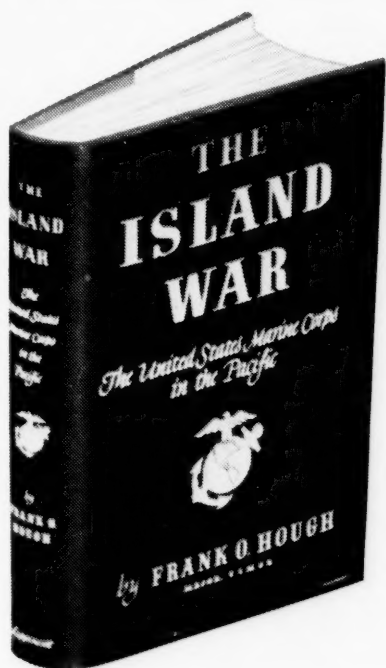
**GAZETTE BOOKSHOP**

ORDER BLANK ON PAGE 62

---

# The Marines in World War II

---



by Frank O. Hough  
Major, USMCR

Only a man who had been with the marines when they hit the different beaches in the Pacific could have written this history. Maj Hough had this qualification plus experience as both a writer and a historian. He was granted access to secret and confidential Marine Corps' documents and supplementary material. He covers in his book the actions of the marines from the opening of the war until the Japanese surrender.

The battle for battle story of the part played by the United States Marines in the winning of the war in the Pacific is presented clearly and accurately in *The Island War*. While not an official history, this book was prepared under the auspices of Headquarters, Marine Corps, and the author's research is based on official files and records. Step by step the book follows the marines as they move across the Pacific, island by island, to victory.

*"This is not the story of individual men but of a certain large body of men bound together by the closest of all masculine ties; that comradeship born of the shared peril and hardships of battle . . . What those men did, how they did it, and what they went through . . . comprises the theme . . . for as far as the Marine Corps is concerned the total results far exceeds the sum of its component parts."*

*The Island War* is illustrated throughout with photographs and maps which make graphic the developing situation in the Pacific. A glossary of terms and abbreviations, a Marine division's order of battle, and a chronology of the Pacific War are extras which add to the completeness of the book and increase its value as a reference text.

ORDER YOUR COPY NOW

\$5.00

---

USE ORDER BLANK ON PAGE 62 — REMEMBER NO C.O.D.'s

---

